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A NEW RESTING AND INVALID CHAIR.

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The philosophy of rest in chairs, embraces some of the following principles:

1st. The weight of the body necessitates rest upon some support during its physical existence. In the standing position, the feet must be supported upon fixed or floating material.

It is proposed to confine these remarks to supine, horizontal, or inclined positions.

In each case the body is in a state of perfect rest, when it is supported at as many points of contact as possible between it and the supporting material. The weight must be distributed as evenly as possible over the largest extent of surface, for then there is a minimum of compression of the tissues. When a swimmer is floating in water, the surrounding fluid is applied over the body, and the weight evenly distributed over the largest amount of surface. But water cannot be employed as a support except in a bed, since its chemical and physical qualities prevent its adoption for a chair except in the condition of ice.

Dry material used for a chair, to be thoroughly adapted as a support, must be accurately fitted to the whole posterior surface of the body. It should be a non-conductor of heat; elastic or non-elastic; ventilated or not ventilated.

2d. The position of the human body at rest should be such as to allow the least amount of expenditure of energy, in order to conduct the circulation of the blood. If there is local compression of any part, there the circulation is impeded ; the resistance to be overcome requires the heart to put forth more force, or nutrition becomes impaired. When the pressure is long continued in the case of sickness, bed-sore often results. The posture in which the circulation is the most easily performed, is that in which the thighs are flexed and the feet supported higher than the head. This position avoids hydrostatic pressure of the blood in the veins of the lower extremities, amounting sometimes in tall persons standing, to several pounds to the square inch, the numerous valves in the same veins also obstruct the passage of the blood. Now in the case supposed, the blood gravitates towards the heart, and facilitates its own return. A quickened circulation means improved nutrition, hence, surgeons used formerly to elevate the lower limbs in the treatment of ulcers of the leg. It means also comfort, hence, the habit acquired by our legal brethren of putting their feet upon chairs and mantels. The habit of sitting in chairs tipped backward is a partial attempt at gaining rest by the same process, a habit which has been regarded by foreigners as a national reproach to us.

But it should not be dismissed with a sneer, for it is a partial carrying out of a principle which faciliates *rest*; because, by it the blood is more readily returned through the veins, aided by it own weight plus the absence of hydrostatic pressure ; and because there is a saving of heart-force. A few moments of heart-rest are not only refreshing but necessary.

This may not amount to so much in health as in disease. Take for example, a case of valvular disease of the heart; there the organ works on under great disadvantages, it is like a pump with one box deranged. It labors hard to push forward the life stream. Sometimes it fails suddenly and the result is death ; but generally it succeeds in maintaining the circulation. This is done, however, at the expenditure of a great amount of vital force. If the other organs of the body, are sound and carefully managed, this strain is readily borne,

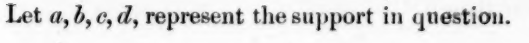
but if the body becomes from any cause wearied, the strain is felt, and palpitation and labored respiration result.

Now if in such a case, the lower extremities be elevated, so that the body will represent an angle somewhat larger than that of the letter V; the head being at the left extremity of the V, the hips at the angle, and the feet at the right hand extremity, then we have the position in which the blood gravitates towards the centre of the body. The heart has the minimum of work to perform, and the conditions of good physical rest are attained, because the body touches its posterior planes, curves and surfaces from head to foot.

A man, aged about 61 years, furnished a practical illustration of the effect of this position. He had organic disease of the heart, indicated by palpitation, only one cardiac sound, dyspnœa, sleeplessness and inability to lie in bed over two hours at a time in the night. He had overworked in mind and body, and thus aggravated all his bad symptoms. At the writer's request he assumed the V position on a chair [to be described], and after two days use of it, his heart became so much rested that he found no difficulty in sleeping all night in bed. Without employing medicine, and aided by rest alone, his heart, relieved of its overload, regained power enough to do its work under the unfavorable conditions of valvular lesion.

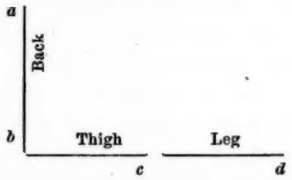
3d. Paradoxical as it may seem, rest for the living human body requires motion. The body is a bundle of kinetic energies. It is unlike inanimate bodies in this, that if kept in one position, the joints become stiff, the body cramped; and, if one single position, no matter how comfortable, be long maintained, the person becomes incapable of normal motion. Let a strong, healthy man lie in bed continuously for weeks,—as in fractures of the thigh,—and he will become incapable of rising and walking at one effort.

It is then desirable, after having arranged for a perfect contact of the under surface of the body, to have the medium of support capable of motion at the great natural points of motion; viz., the hip and the knee.



Let a, b, c, d, represent the support in question. At b, place

a joint moving in a vertical plane for the hip. At *c*, place a like joint for the knee. It is seen at once that a variety of movements may be executed with this device, analagous to those of the body, as follows:



Elevate *a*, *b*, to a right angle with the *b*, *c*, *d*.

Suppose a man extended upon this support, and we have the very comfortable chair found in the Boston barber-shops. Here the weight of the body comes upon the legs and thighs. The hydrostatic pressure is lessened by the height of the lower limb, and the heart column is correspondingly relieved.

But if long maintained, this position becomes irksome. A healthy person can change it, but the invalid cannot. How, then, can we give this support, and permit a change?

Simply by putting the support on a frame work and jointing it at *b*, so that the *V* rotates 90°, upward.

FIGURE I.

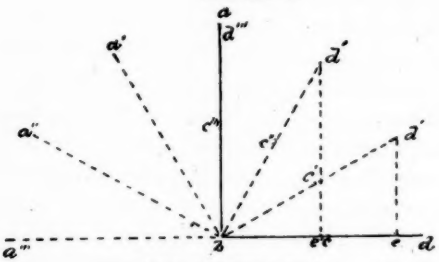


FIG. I. represents this motion; *a*, *b*, *d*, is the position described; *a'*, *b*, *d'*, the same when the support is turned back. The angle *d'*, *b*, *d*, represents the angle of inclination of the thighs. The dotted line *d'*, *d*, represents the hydrostatic pressure relieved; *a''*, *b*, *d''*, the *V* position exaggerated, as *d''* is higher than *a''*.

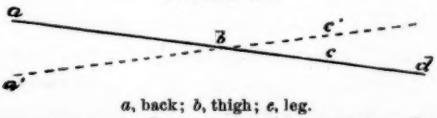
When a'' is of the same height as d'', the weight is divided according to the weight of the parts.

A''', b, d''' represents the whole weight of the body thrown upon the back,—a theoretical, but not a practical position, the feet being elevated. Both body and legs are here reversed 90° from the position a, b, d.

Here, then, support and motion are combined so as to throw at will the body-weight on the back or thigh, or to divide it equally between both, the division being in any proportion desired. This arrangement is advantageous, because it distributes the pressure evenly, and yet allows of change. Still, it involves immobility of the great joints. By referring to the diagram it will be seen that it is easy to get more motions by using the joints in the support a, b, c, d. In Fig. 1, bend down c, d to a vertical position, and a, b, c, d, will represent a common chair position. Rotate this backward 45° upon the supposed frame and the W position is attained when the thighs and legs are flexed, and yet perfect support attained.

This forms the "triple inclined plane" of Dr. Lewis A. Sayre, of New York city, with this exception, that the joints in the described device are movable and adjustable. It is an excellent, theoretical, and practical position for persons suffering from fracture of the thigh. The weight of the body gives the extension, the position of the legs, the counter-extension. Being fitted to the sound thigh, of course the broken thigh is constantly drawn into place. The joints are, or can be, kept moving while the extension is continued. As motion is the natural condition of a joint, of course any device which allows of proper extension with absolute and relative motion (change) is a desideratum.

FIGURE II.



a, back; *b*, thigh; *c*, leg.

FIG. II. represents a change in the position first given, so that the head approaches the floor,—a position which is useful in case of fainting from any cause.

With this device a, b, c, d, hung at b, on a frame, any pos-

ition of the human body, sitting or reclining on the back, may be imitated. More than bed or lounge, or any previously offered device, it offers the opportunity of depressing the head and trunk almost to the floor.

With these preliminary observations, the writer desires to call attention to the contribution he offers, in solution of the mechanical problems proposed.

FIGURE III.

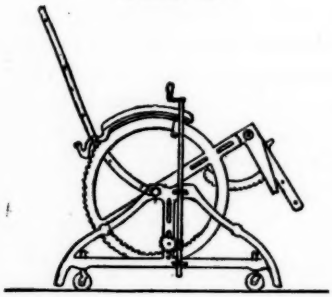


FIG. III. Mechanical drawing of author's chair.

The frame is made of cast iron, heavy enough for durability and safety. The back is curved to fit the body and varies in length from 24 to 36 inches. The sides are formed by circles, in order to get the strength of the double arch. Notches are cut on the posterior and upper quarters of the circles, in which play pawls attached to and regulating the back portion. Teeth are cut on the inside of the lower and posterior quarter, in which play cogs that are turned by an endless screw on a shaft attached to the side of the frame-work. This screw ensures control of the apparatus and regulates its motion. It may be turned by the patient. The circles, also, afford support for the arms of the chair. An iron cross-bar traverses the horizontal diameter of the circles. This affords strength, and extending forward, forms an attachment for the seat portion and the bracket for the leg portion. It is fenestrated so that the seat portion can be lengthened. The leg portion consists of a U attached by a joint to the end of the seat portion. Half way down on each side are long pawls with teeth cut on the convex side which engage in the brackets of the seat portion.

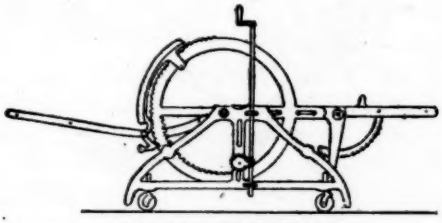
Suitable horns project in front from these pawls to permit their being lifted when it is desired to flex the legs. To extend the leg portion it is only necessary to draw it out upwards.

Foot Rest. This was attached to the earlier chairs, but has been abandoned as, unless fitted accurately to every leg, it prevented the accurate resting of both thigh and leg upon their support. Besides, the device is intended to relieve the feet from pressure. When a chair is intended for the use of only *one* person a foot rest may be applied.

The thigh portion measures 17–22 inches. The leg 17 inches. The width of the chair varies from 18 to 25 inches.

Three inch castors are placed under each corner of the frame. The size of the frame was determined by actual test, and the length of side was governed by the stability under ordinary circumstances. Invalidism must have a chair that will not easily tip over. Remove the castors and the chair becomes almost a fixture.

FIGURE IV.



Bed position of the chair.

FEATURES OF THIS CHAIR.

(*a*). Center of support, the center of motion.

(*b*). Motions, those of the hip and knee joints, in vertical planes.

(*c*). Absolute motion without relative motion of body, thigh and leg.

(*d*). The reverse of the last.

(*e*). Accommodation to abnormal conditions, fractures and anchylosis.

(*f*). Person can change the part rested upon. In bed-ridden cases, this is of service in preventing bed-sores.

(*g*). A person can be raised from a supine to a sitting posture (or the reverse) gradually, and stop at thirty-four points on the way.

(*h*). Adjustments to different lengths of thighs.

(*i*). Patient may be removed from bed to chair without lowering.

(*j*). Absolute motion made by endless screw and pawls of the simplest forms.

USES.

1. *For orthopnœa*, as in asthma, heart disease, rheumatism, and where persons are obliged to sit up all night and cannot lie in bed.

2. *For Fracture Bed.* See sequel.

3. *For Operating Chair*, this was the original design of the chair to be used in modified thyrotomy as published by J. Campbell & Son, Boston, 1867.

FIGURE V.

Fig. V. Device for holding a child in the operation upon the thyroid cartilage.

For surgical operations of other kinds, it permits close contact of the operator and fixation of patient. Faintness from hemorrhage is controlled; vomiting is readily managed by elevating to a vertical position.

As a *gynecological* and *office* chair, I have found it useful. See sequel.

(4.) In convalescence and invalidism it is a useful means of getting a patient out of bed so as to use an ordinary chair. See sequel.

(5.) *In health*, it may be used as a reclining and resting chair. Women generally find it very restful in backache.

They are sold from $35 to $45; are durable, and will last for a generation with ordinary care. The upholstering varies with the tastes of the patient.

FIGURE VI.

Chair with Fracture apparatus, which may be detached by removing one screw.

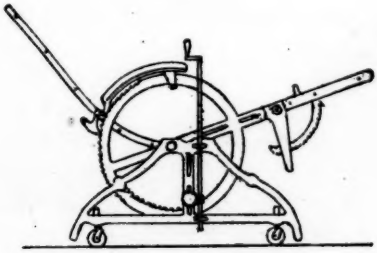
The device of the author represented in the cut, is for extension in fractures of the thighs or legs. It is held securely in place by one screw. Extension may be made by a weight attached to a cord that passes over a pulley, or by an india-rubber tube fastened to the slot in which the pulley plays. By this arrangement the joints are kept in motion without disarranging the extension. The patients may sit up for the sake of eating, reading or writing. For defecation, &c., a bed pan is provided, made somewhat like a common dusting pan. The patient may be moved about the apartment, up to the window or even into another room. In this manner the tedium of confinement is very much alleviated. This relief is by no means an unimportant element in securing a successful and satisfactory progress of the case. The elevation of the head and the motion of the great joints ensure a shorter convalescence.

The shocks, also, of motion and jars of the apartment,

ordinarily so troublesome in rheumatic fever, are not felt, as the suspension of the patient is all upon one centre.

The following cases of fracture have been treated in the manner described :

FIGURE VII.



Case I. V position : a middle-aged, medium-sized, robust man, aged 50 years, was thrown from his carriage early in July, 1872. He sustained a compound fracture of the right ankle joint, the lower portion of the thigh presented a Y fracture, and the malleolar process protruded one and one-half (1½) inches through the skin. The ankle joint was laid open. He was placed upon the chair in the V position, the thigh and seat portion being on an elevated single plane. A fracture box was placed on the lower part of the chair, and the projecting part of the box supported by a stand. The fractured limb was surrounded with sponge soaked in glycerine and packed in three pads of linen, one below and one on either side of the leg ; the pads were covered with oil-cloth near the side of the wound, no bandages or circular compression of the limb were employed.

At night, the back portion of the chair was lowered to the level of the other part ; in the day time, it was raised to any desired elevation. He had during the course of treatment, pneumonia, secondary fever from inflammation and purulent infiltration of the joints and surrounding parts. The wound discharged at least one pint of pus. When he stood on his feet for the first time he *immediately* walked through the hall to an adjoining room, an exceptional circumstances in my ex-

perience of similar fractures, the reason being that an enforced recumbent posture for seven weeks or more, causes an accommodation of the system's circulation adapted to the posture. Any sudden change from the dorsal to the erect position is then followed by a disturbance of the nice economy of the heart-force, so that faintness results. The arrangement of this patient's bed allowed of frequent changes of position, so that there was no disturbance of the central circulation, and locomotion became immediately possible. This patient made a good recovery in joint and limb.

Under date of June, 1877, he writes :—"The relief on being placed on the chair after lying upon the bed for a few days was great. I was not taken from it for *ten* weeks, during the hottest of weather, when a bed is almost unbearable. I could eat, sleep or write upon it; my position could be changed at any time, and this afforded much relief. It (the chair) is easily managed, and, I can honestly say, it is the best and most comfortable I have seen. Having tried it, I know."

This was the first case of fracture treated in the chair, and thus it possesses an unusual interest.

Case II. A boy, eight (8) years of age, very nervous and pale, was thrown off a pony in March, 1875, and sustained a simple fracture of the right femur, middle third. Fears were expressed as to the effect of the shock upon his nervous system, in view of the fact that he had been difficult to manage whenever he had been sick before. A chair was arranged with a ten-inch thigh portion. The back of the chair was upholstered with Brussels carpeting, the seat with sole leather and the leg portion with carpet. He was transferred to the chair as follows: Chair placed in the horizontal position; a pole six feet long and two inches in diameter was held over the boy as he lay in bed. A blanket on which he lay was then drawn over the pole from both sides of the boy, gently made tense and fastened by tacks driven through the blanket into the pole. He was then raised by the ends of the pole and placed upon the chair so easily that he did not know when it was done, as he could not see. Adhesive straps were fastened to the thigh and connected with a weight simply hung over the back of the

chair. This furnished the extension. To ensure safety, a sole leather splint was placed around the fractured thigh. The chair was continually moved about, and the back, thigh and leg portions were repeatedly moved backwards and forwards, giving motion to the hip and knee joint without at all disarranging the extension. A common dust-pan covered with newspaper served for a bed utensil. In a few weeks he made a perfect recovery, so much so that his uncle said he could not tell from his gait which limb was broken. The quick recovery must be attributed partly to his youth, partly to a diet of animal food and unbolted grain, and partly to the movable and adjustable bed chair.

Case III. Miss A. R., aged 70 years, single; fell while crossing the oiled hard pine floor of her kitchen in April, 1875. She had been in miserable health during the fall and winter previous, with digestive troubles which an autopsy shows to have beeen due to cancer of the liver. Her debility was so great that she kept swooning away after the fracture, and it was with great difficulty that she could be kept from dying, by the use of diffusible stimulants. She was, however, placed upon an invalid chair. Adhesive plasters, an India rubber tubing, and a fixed point beyond the foot furnished the means of extension. The tubing furnished an adjustable, direct, elastic extension in a small compass. At the very outset of her confinement in the chair, Miss R. fainted away frequently from sheer weakness. Whenever this occurred, it was only necessary to turn the chair backward and to lower the head until the equilibrium was restored. At the time it seemed as if this change of position alone saved her life, as the fainting fits were so long continued that medicines lost their effect, the gravity proving more valuable than the drugs. A singular and unusual experience followed this, in that she had an attack of diphtheria, the membrane being abundant and visible in the throat. There was fever, and cervical adenopathy. At times she was choked by the detached membrane, and when this occurred, she was rapidly brought to an erect position. She was thus enabled to manage her throat and mouth, as she could not have done in the ordinary horizontal position. So that in fainting and

vomiting she tested the chair quite thoroughly. Curiously enough, the fractured bone united well and promptly with three-fourths of an inch shortening. When it was healed she was replaced in bed.

Her miserable and painful existence, however, was in a few weeks brought to a conclusion by cancer of the liver. The organ was found to be enlarged, and studded with yellowish globules of considerable consistency. Her life certainly seemed to have been prolonged by the use of the chair.

Case IV.

In Dec., 1876, Mr. J. D—— tried to remove some ice from his boot-heel by kicking, and fell. When raised he was found to have sustained a dislocation of the left ankle joint, and a complete fracture of both malleoli. The dislocation was relieved by bystanders. He was placed upon a cane chair covered with a hair mattrass. The extension apparatus represented in the cut, was employed in this case. It worked well. There was no difficulty in assuming comfortable positions. The malleoli became rapidly attached in place, but the ligaments and torn fascia were as usual, long in healing. The patient and his friends expressed great satisfaction with the use of the chair, as it relieved the tedium of confinement. Recovery was good, though the patient was a man of full habit, very strong and muscular, and unused to being shut up in the house.

Case V.

Dr. S. W. Kelly, of North Cambridge, Mass., aged 55 years, was walking down Hanover street, Boston, when he suddenly found himself lying upon the icy pavement. He had slipped over an iron coal scuttle. On examination he was found to have a dislocation of the ankle and fracture of the internal malleolus of the tibia.

His subsequent experience was almost the same as that of Case IV, though being of a nervous temperament the confinement was more irksome. He, also, had a slight attack of inflammation of the lungs. He made a speedy and good recovery, and says that he can conscientiously recommend the chair

from personal knowledge. He is a regularly educated physician and a member of the Massachusetts Medical Society, in good standing. He has had a large experience in the practice of his profession.

CASE VI.

Mrs. A. W., of Boston, while visiting in Dec. last, fell and sustained an impacted fracture of the neck of the femur. She was a widow 82 years of age, and of active habits. The diagnosis was concurred in by three surgeons. She was not rendered helpless. With assistance she could change from bed to lounge or chair. There was inability to use or move actively the injured limb. For the first month she used a common Holmes' reclining chair. She was, however, not satisfied with it, and later made trial of the device herein described. This proved so satisfactory that she declared she gained "two days in one" by its use. No extension or bandage was used, the position on the chair being solely relied upon. She has made a remarkable recovery considering her age, with but one-half inch shortening. She walks up and down stairs, and about the house with a cane, and now has gone to the sea-shore for the summer. To the writer, this case has shed a new light upon the treatment of fractures of the thigh. Is it not a mistake to invariably apply bandages and extension? The physical changes resulting from the injury must obstruct the circulation in the limb. This may be called a *central* obstruction. Is it well to add a peripheral obstruction by bandaging? This patient might have recovered by the aid of other appliances, but it is not disparaging them to say that the chair last used certainly did well and facilitated recovery.

3. As an *operating chair*. Dr. Gilman Kimball, of Lowell, has employed it in a case of amputation of the breast. He expressed himself as pleased with it. In ordinary chairs, the patients when anæsthetized slip downwards. With this device this difficulty is obviated by simply using the chair as a V and elevating the feet. A point of resistance is thus formed. In a late case of modified thyrotomy for the removal of a sessile growth that lined the whole larynx, the writer found his chair

very useful. The operation was difficult, and protracted for one and a half hours. The patient was put (just where she was wanted) into positions impracticable by any other means known to the writer. The facility with which the operator placed himself in a suitable relation with the patient, relieved the arduousness of the trying dissection.

As a *gynecological chair*. The writer has placed women upon their backs and sides in the chair, and then depressed their heads, so that the sun's rays shone directly on to the os uteri through the speculum. Direct or reflected artificial light may be used for the same purpose, as follows: Drop the leg portion to a right angle with the thigh portion, the back being slightly elevated. The patient sits down on the seat, then lies down in the dorsal or lateral position. A few turns of the endless screw depresses the head and elevates the buttocks so that the operator, sitting or standing, can look downwards just as in writing or eating, *i. e.*, the most natural position for observation. I have used the chair in exploring the uterus by Simon's method—that is, by passing the whole hand and half the forearm into the rectum and large intestines. The peculiar position given by the chair was found to be very favorable.

I have also used the chair in measuring and fitting a pessary. The following statement indicates what the patient herself can do with the chair. A lady suffered much from an ulcerated and hyperæsthetic condition of the uterine cavity, which intra-uterine topical applications alone benefited. Circumstances of time and distance forbade the frequent attendance of the writer, as often as was necessary. The patient asked, if she could not be instructed to make applications herself. The attempt was made with perfect success. Lying on the chair on the back, opposite a window, she applied the Storer speculum, held a mirror between her knees, saw the os in the mirror (this I verified,) and applied her medicament with a Pinkham's scarificator. This instrument, like a uterine sound, is grooved longitudinally, the medicament is rubbed up with lard and deposited in the groove near the extremity. A small pledget of cotton is placed in the groove next the proximal end. A wire traverses the groove, and one end of it rests on the cotton, the other project-

ing. When the instrument is introduced into the uterus to the point desired, it is only necessary to push forward the wire. This advances the cotton pledget, and extends the ointment.

The same patient has applied slippery elm tents, in a similar manner through the speculum.

In *convalescence.* Sometimes patients exhibit a determined inclination not to sit up in an ordinary chair, after a long sickness, when it seems as if they might do so. An instance of this occurred to the writer. The patient was induced to use the chair. At first the bed position was used. The erect position for the trunk was gradually assumed, then the legs were dropped. The spell was broken; the invalid went down stairs to dinner after two days use of the chair.

Another lady, suffering with fibroid tumor, found the chair a great relief to her pain and weakness.

Indeed it is useless to multiply the histories of such cases. As a resting chair for over-worked persons, it has produced practically the happiest results.

The chair is not a proper locomotive chair. It does not answer every imaginable purpose, but in the instances that have been named, the expectations raised were, humanly speaking, fully realized.

A NEW METHOD OF TREATING FRACTURE OF THE CLAVICLE.

HENRY VAN BUREN, M. D., Chicago.

While one of the visiting physicians of the Central Free Dispensary about two years ago, I treated a patient for fracture of the clavicle, adopting the plan of my friend Dr. Lewis A. Sayre, of New York, using two strips of adhesive plaster without any axillary pad.

I became convinced at once, that the principle advocated by Prof. Sayre, was undoubtedly the correct one; but before I had gone very far in the use of the adhesive strips, I found that my patient, a young native of Ireland, began to tear them off. The weather was warm, and, to use the language of the lad, they "itched him."

Finding this difficulty in holding the arm and shoulder back by a hitch around the body with adhesive plaster, the thought struck me, that I would make a hitching post of the sound shoulder instead. Not as in the old plan of a figure of eight around both shoulders, but upon that which I will now lay before my brethren in the profession.

To make known my plan in a sentence—I make attachment to the middle of the arm on the fractured side; draw the arm backward until the clavicular portion of the pectoralis major muscle is put sufficiently on the stretch to overcome the sterno-cleido-mastoid, and then make a hitching post of the sound shoulder to hold these muscles in extension, and by this extension with the sling, which will be hereafter described, the ends of the fractured clavicle are held in apposition.

I make the first bandage 3 or 4 inches wide out of unbleached cotton, of double thickness and sufficient length. On one end of this bandage a loop is made, by returning the bandage on itself, and fastening the end with a few stitches. The hand on the injured side is then passed through this loop, and the loop carried up to a point just below the axillary margin. This bandage is then passed directly across the back, and under the sound arm and over the sound shoulder, and returned across the back, and pinned or stitched to itself at the point where the loop is formed. See figure 1.

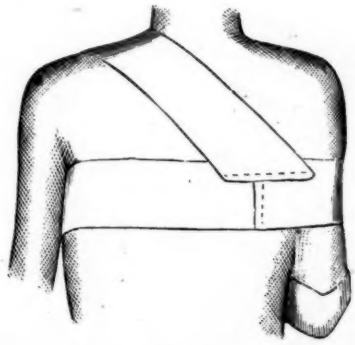


Figure 1. VanBuren's first bandage for fractured clavicle. Back view.

The second bandage is then made and applied as follows: I flex the arm of the injured side, and place the hand on the chest, pointing in the direction of the sound shoulder; I then take a piece of the same material as used in the first instance, and make a bandage 4 inches wide, of double thickness and sufficient length, and pin or stitch one end of this bandage to the lower margin of the first bandage, in front of the sound shoulder. It is then passed diagonally downward, and across the chest under the hand and forearm which has been flexed upon the chest, and carried around the arm at the elbow, and back on the dorsal surface of the forearm and hand to the point from which it started, and this end also pinned to the first bandage.

I then stitch the lower margins of this bandage together for a distance of about three inches at the elbow, thus forming a trough for the elbow to rest in. I also do the same at the upper end of this bandage, which forms another short trough for the hand to rest in. See figure 2.

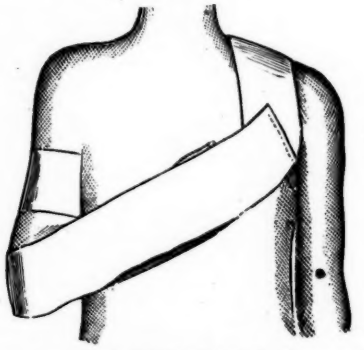


Figure 2. VanBuren's second bandage for fractured clavicle. Front view.

This bandage or sling may be made as described above, before it is applied, and the elbow placed in the lower trough and the hand in the upper one; and the upper ends of the bandage pinned to the lower margin of the first bandage, at a point opposite the sound shoulder, as above indicated; indeed I prefer this plan because more convenient.

This sling serves the triple purpose of drawing the lower

end of the arm forward and upward, and thus throwing the injured shoulder backward. It supports the fore-arm and hand in a comfortable and quiet position, and last, it prevents the first bandage from cording under the sound arm by its attachment to its lower margin.

To prevent the first bandage from producing excoriation in the axilla of the sound side, I usually cushion the bandage at this point by stitching on two or three extra thicknesses of the cotton cloth. The same may be done at the loop,—around the arm of the injured side, if necessary.

What is presented, then, for the consideration of the profession in this method is—

1st. The great simplicity of the appliance.

2d. The complete retention of the fragments in apposition.

3d. The comparative ease with which the bandage is worn.

The deformity which takes place in fracture of the clavicle is too well known to require any description; viz., that the shoulder falls downward, forward and inward, and that the outer end of the sternal fragment overlaps the inner end of the acromial portion of the clavicle.

The indications to be fulfilled in the treatment are also well known; viz., to draw the shoulder upward, outward and backward, and retain it there, and thus by virtue of this position, hold the fractured ends in apposition.

It will be observed that the first bandage, as presented in Fig. 1, not only draws the shoulder backward, but has a lifting tendency, the bandage being at a higher point, where it passes over the sound shoulder than where attached to the arm on the injured side, hence the shoulder is drawn upward; also that the deltoid and biceps muscles are quieted by the loop around the arm.

Let the surgeon himself stand erect and thrust backward and upward his own shoulder, the one supposed to be the injured one, and flex the fore-arm upon the chest, with the hand pointing in the direction of the sound shoulder, and he has at once secured the position and fulfilled all the indications desired in fracture of the clavicle; and the bandages presented

in this paper retain this position in a very simple and practical manner.

A patient of mine under treatment for this injury, was brought before the Chicago Medical Society, at one of its regular meetings in May last, after union had taken place;—and I think the gentlemen who were present can say that there was little or no deformity in the case before them.

I also had the privilege of doing what was so much desired before submitting this paper for publication, that of bringing this method before a number of surgeons of high standing in the profession, at the late meeting of the American Medical Association, among whom were Dr. Lewis A. Sayre, of New York; Drs. Gunn and Powell, of Chicago; and Drs. Bridge and Hyde, associate editors of the MEDICAL JOURNAL AND EXAMINER, who approved of the plan laid before them.

I was eager for the opinion of Prof. Sayre, who was the first to put into practice the principle laid down in this method, and the plan received his hearty approval.

I have treated every case of fractured clavicle upon this plan, which I have been called upon to attend for the past two years, modifying the appliance from time to time, until the indications sought after were more perfectly acquired.

At the beginning of the third week, or earlier, the bandages should be removed occasionally, and passive motion of the elbow and shoulder made.

We are of the opinion that judicious movement of all fixed joints has been too long delayed, by most surgeons in cases of fracture. In the fracture presented in this paper, with the bandages used, early movement is indispensable, inasmuch as the parts are held so completely quiet.

And now, if any apology is needed for trying to present a new way for treating an old fracture, the excuse must be found in the fact, that we think the old plans were failures, notwithstanding the many and complicated means devised to secure retention.

Dr. Sayre has quoted, in his pamphlet on this fracture, from a dozen authors, running back to the days of Hippocrates, showing that this injury has always been attended with deformity.

In Prof. Hamilton's work on Fractures and Dislocations, the author quotes from fifty-seven different authors, to sustain his own observations, that this fracture is nearly always followed by deformity.

Miller, Ferguson, Simpson, Hancock, South, and many others of England, and a grand array in other countries, have all had their wedged-shaped pads, and never-ending turns of the bandage around the body, but I cannot see that they accomplished more than to keep the fracture quiet, and thus facilitate a kind of union with, as they all acknowledged, more or less deformity.

South says that he does not like any apparatus which draws the shoulders backward. If the author means both shoulders, we are agreed; but I want one shoulder, and that the injured one, drawn backward and well backward at that,—for herein we get extension and counter extension too, if you please, the thing so essential in fractures of all long bones, and we cannot get this in any other way. The pad under the arm does not cause adequate extension, nor will it ever do so, no matter how large or in what manner placed.

The figure of 8 bandage of modern use, is to me exceedingly objectionable, for one important reason, if for no other. If the fracture is in the middle third of the clavicle, or near the middle at all, the bandage presses down over the site of injury, and particularly over the inner end of the outer fragment, the very end already dragged down by the weight of the shoulder, and just here is one of the valuable points in what we have termed a new method. The injured shoulder is entirely free from any depressing or other bandage. I do not even allow the patient to wear a suspender over the injured shoulder.

DeSault, Dupuytren, Cloquet, Salamon, and Jæger, all carry their bandages over the injured shoulder, and all admit, as they must do, that they get angular deformity.

The "postural position" might do quite well for an indolent man, but even then we might fail in getting union again. This is an age of fresh air and hygiene, and every patient, as far as practicable, should have the advantages of out-door exercise.

I am no stickler for any particular apparatus in the treatment of fracture, any more than I would be for any particular medicine in disease. Whatever accomplishes the end in the most simple manner under existing circumstances, is generally, if not always, the best, and the plan for treating fracture of the clavicle, as presented in this paper, is in keeping with this doctrine, and is brought before the profession with confidence, and we believe that a good result can be attained in the hands of any surgeon, if the method is faithfully and intelligently carried out.

Chicago, August 1st, 1877.

THE APPLICATION OF THE CORN SWEAT IN DISEASE.

By Frank Allport, M. D., of Sycamore, Illinois.

In the February number of the Journal and Examiner, for 1877, appeared a short article on the "Corn Sweat." To that article I must refer those who read this, for the method of administering the "sweat," and confine myself now to its application in disease, and to a brief resumé of a few cases in which it was the chief remedial agent used.

I would not be understood to mean that the true nature of this remedy is to be found only in the "Corn Sweat." There is no particular virtue to be attributed to the corn. It is merely a simple, efficacious and convenient method of administering the principle; viz., "*external heat.*" Perhaps the chief value of external heat is in the treatment of the "pyrexiæ," and among these, it is in scarlet fever that I am more especially prepared to urge its use.

I have treated twenty-six cases of this disease, in which my main reliance was the "Corn Sweat," and have not lost a patient. Among these, only one was left with any of the troublesome sequelæ. This was a slight otorrhœa, which was easily cured in a few days, and in which the "Sweat" was not applied as soon as it should have been. No dropsy occurred in any of them. From my twenty-six cases, I have selected a few of the most typical, of which I will give a brief synopsis.

CASE I. A. J., aged 10 years, taken sick Feb. 8th. I was called Feb. 10th, and found a well marked case of scarlet fever, with the exception of the eruption not having yet made its appearance. Patient was delirious; urine suppressed, temperature in axilla 107° F., pulse 144. The severity of the case was at once apparent, and the most active treatment was resolved upon. In three-quarters of an hour, the patient was in a "Corn Sweat," and had taken fifteen drops of the sweet spirits of nitre, and twenty grains of the sulpho-carbolate of sodium. In a quarter of an hour after the "sweat" was commenced, a slight moisture was felt on the surface, which in half an hour developed into a profuse perspiration. The "sweat" lasted about an hour and a half, at which time a distinct rash could be seen all over the body. The temperature was reduced to 102°, and the pulse to 140. The delirium had ceased, although perfect consciousness was not restored, and after the administration of ten drops of sweet spirits of nitre, and ten grains of sulpho-corbolate of sodium, she slept three hours and awoke perfectly conscious, although much prostrated. At this time she passed about a pint and a half of very high colored urine. The eruption was now quite distinct, temp. 103°; pulse 132. The nitre and sodium were ordered, ten grains, and ten drops respectively, every four hours. Calling again in nine hours, I found the patient a little flighty. Only about a quarter of a pint of urine had been passed. Temp. 104°; pulse 136. Another "sweat" was administered, lasting about an hour and a half. Half an hour after it was finished, the temperature stood 102°, and the pulse 120. She now slept quietly six hours, and awoke perfectly conscious. About five o'clock of this day, (Feb. 11th), about 12 hours after the administration of the second "sweat," the patient was in good condition. Temp. 102°; pulse 120. About a quart of urine had been passed since two o'clock, and several smaller discharges before that time, and a free operation from the bowels had occurred. I administered another "sweat," however, which lasted for about an hour, and which reduced the temp. to 101°. She passed a quiet night. She went on to make a good recovery, and in two weeks and one day, after the attack (Feb. 8th), the rash had disappeared, the

patient was up and around the house. I gave her a short "sweat" every day, until Feb. 18th. Administered the nitre and sodium till Feb. 15th, when I substituted for them iron and quinine.

Case II. B. F., aged three years, Nov. 15th, was taken sick in the afternoon. I was immediately called and found the patient, although not very sick as yet, still with some of the symptoms of scarlet fever. At any rate, as the disease was prevalent in the neighborhood, I resolved to treat the child, as if I could diagnosticate scarlet fever without any difficulty. The temperature stood 100°, and the pulse 115.

I prescribed a diuretic, and placed the patient in a "Corn Sweat," not without some trouble, however, as she was so young. I kept her there for about three-quarters of an hour, at the end of which time a faint efflorescence had appeared. The temperature was still 100° and the pulse 110. In about fifteen hours, the temperature had reached 101°, and the pulse 120. The secretion of urine had been scanty and high-colored. I placed the patient again in a "Corn Sweat," which lasted for about an hour. A very free perspiration took place, and the rash was now very bright all over the body. Half an hour after the "sweat," the temperature was 100°; pulse 110. In about ten hours I called again, and found no change. Gave another "sweat" of about half an hour's duration, which made no difference in either temperature or pulse. Between the two last visits, she had had, twice, a plentiful discharge of urine, and an injection of castor oil had produced an evacuation from the bowels. In about twelve hours, after a night of quiet sleep, the temperature was 100°, and the pulse 106. The urine was now plentiful, and the child was doing well in every respect. This was on the third day. The temperature kept steadily at 100° until the seventh day, (with the exception of one day, when it was 101°) when it began to decline, together with the pulse; and a week and a half after she was taken sick, all symptoms of the fever had disappeared. I gave her tonic treatment at the latter end of the disease, under which she made a good recovery.

The case that I am about to describe, is the severest one that

came under my direct observation, and I think illustrates most fully the peculiar efficacy of this remedy in scarlet fever.

Case III. H. C. Aged 12 years. Was taken sick, Jan. 3, with intense headache and vomiting. In a short time delirium, followed by other symptoms of the disease, set in. After the child had been in this condition for two days, during which time no physician saw her, I found her in the state mentioned above. There was a very scanty secretion of urine, and the faintest appearance of a dirty-red efflorescence, here and there on the body. The temperature in the axilla was 109°, and the pulse 156. Here was clearly a case of malignant scarlet fever. I gave ten grains of quinine, and a half a teaspoonful of sweet spirits of nitre, in a wineglassful of brandy. Put the patient into a "corn sweat," which lasted for about two hours. The rash became a trifle more visible, and the temperature was reduced one degree. These were the only changes. In two hours I repeated the operation, the temperature, in the meantime, returning to 109°; and had the satisfaction of seeing it reduced one more degree, (107°); the pulse numbered 152, and the rash rendered still more distinct. I repeated also the doses of nitre and brandy, and gave five grains of quinine. In three hours another "sweat" was given, lasting about an hour and a half; at the end of which the rash came out all over the body, in a scarlet-red hue, and in half an hour the temperature was 103°, and the pulse 140. The patient was now much more quiet, and disposed to sleep. Urine was passed, a short time after the "sweat," quite plentifully. I ordered nitre and quinine, in doses of ten drops, and two grains, respectively. In six hours after the termination of the last "sweat," the temperature having risen to 105°, and the pulse to 148, another "sweat" was given, which lasted an hour and a half, and which reduced the first to 103°, and the latter to 140. A plentiful evacuation of urine had occurred meantime, and an injection of castor oil had produced a free discharge from the bowels. The delirium had disappeared, and the eruption was decided. Ten hours from this the temperature was 105°, and the pulse 148. A "sweat" reduced these to 102° and 136 respectively. Several discharges of urine had taken place meanwhile. She

was still quite rational, and slept well that night. In twelve hours she was in the same condition. The urine was somewhat scanty, and high colored. She had had a small discharge from the bowels, the temperature was 104°, and the pulse 140. Another "sweat" reduced these to 102°, and 132. She had now been sick five days, and was in a fine condition to recover. She did recover at the end of about three weeks, with a slight otorrhœa. I could enumerate many other cases of scarlet fever, in which the efficacy of the "sweat" would, I think, be quite as strikingly shown as in the foregoing.

I have two other cases to submit, one of typhoid fever and the other of dropsy, in which the "corn sweat" was used.

Case IV. A. E., aged 11 years. She had been feeling badly for some days. Had slight headache, and an indisposition to either work or play. Nov. 19th, she took to her bed with diarrhœa, slight tenderness in right iliac region and cough. Temp. 100°; pulse 99. I ordered a mixture containing sweet spirits of nitre, and syrup of ipecac; and powders of Dovers' powder and quinine. During the day her symptoms continued much the same, except that they all, with the exception of the diarrhœa, (which was alleviated) became aggravated. In the evening her temperature was 101°, and her pulse 105. One other symptom was now added to the list, viz., epistaxis.

During the night I was called and found the patient delirious. Temperature 102°; pulse 110. At about two o'clock, had her in a "corn-sweat." She soon began to prespire freely. She was kept in the "sweat" for about two hours, and *before it was completed*, her delirium ceased, and she was laughing and playing with those around her. At about six o'clock that morning, her temperature was 99°, and her pulse 100. I did not find it necessary to give another "sweat." All her untoward symptoms disappeared, and in two or three days she was up and around the house, feeling quite well considering the circumstances.

Case V. J. C., aged 5 years Nov. 24, 1876. Patient was greatly enlarged; œdema was everywhere plainly visible, and the abdomen seemed distended to its fullest capacity. Dyspnœa was very marked and vomiting had taken place.

The child took scarcely any interest in surrounding objects, and would hardly speak, but was still perfectly rational. A subsequent examination of the urine, (of which the secretion was very small), revealed the presence of albumen, renal epithelum, and epithelial casts. I put the patient in a "corn sweat" and ordered elaterium and sweet spirits of nitre, to be administered three times a day. The patient was in the "sweat" for nearly two hours, and had profuse perspiration. I neglected to measure the abdomen, but am convinced its circumference was reduced at least an inch. Another "sweat" was given that evening. I continued them once every day for three days, at which time the patient appeared to be reduced to his normal size. From that time to the present (May, 1877), no dropsical symptoms have appeared. The child is apparently well.

In scarlet fever, it cannot be in the treatment of the *disease per se*, that this measure is valuable, but *in the removal from the body of its poisonous and effete materials* confined by the nature of the affection. By its relaxing powers it compels the blood to seek the surface, at the same time relieving viscerial congestion. *In all fevers*, the muscles and other tissues waste. With the systemic waste the production of carbonic acid, urea, and other excrementitious substances, is increased, yet their means of egress are curtailed. *To meet this emergency, some way of increasing the secretion of urine and perspiration must be found. The external application of heat seems to answer this purpose. It opens the pores of the tightly closed sweat-ducts, and allows the water of the blood, loaded with the products of disease to escape, and by so doing creates an entirely new state of affairs, under which the patient is in an infinitely better condition to recover. Some diuretics, such as sweet spirits of nitre, may also be administered, but the "sweat" will so far relieve renal congestion that a freer secretion of urine will be observed.*

MULTIPLE URETHRAL STRICTURE AND URINARY FISTULÆ—DIVULSION AND URETHROTOMY.

By Alexander Fisher, M. D.

On the 12th of February, 1877, I was called to attend Mr. J., aged 29 years, of a bilious temperament, and he gave me the following history of his case:

Up to the year 1862, he enjoyed fair health, but at the date mentioned, he contracted preputial chancre, which was not treated for nearly one year, the sore discharging most of the time. He then consulted a physician, under whose treatment the sore healed, but in December of 1863 he contracted a gonorrhœa, which lasted for a long time, resulting in a gleet which had never been relieved. In 1871, he first discovered that he could not pass his urine freely, and his physician decided that he had a stricture, though the urethra was not explored, and internal treatment only employed. The straining and dysuria, with the occasional escape of blood and mucus from the urethra, continued without much impairment of the general health, until January, 1875, when the perineum became inflamed, and swelled till a tumor presented as large as the fist, which was opened and gave exit to about a pint of pus. Two days afterward, more than half the quantity of urine excreted passed through the opening, though when making expulsive efforts some water still passed by the urethra. In December, 1875, he had a discharging sore over the tibia of the right leg, which remained open for about one year, and finally closed under the administration of the iodide of potassium, leaving a delicate, slightly pigmented, circular and unattached cicatrix, two inches in diameter.

In June, 1875, the perineal abscess healed, and the urine passed normally for a few months, but in January, 1876, the

perineum and posterior scrotal region became again swollen, and opened in several places, through which urine escaped, in quantity about two-thirds of that evacuated.

At the time of my first examination, he told me that he had a chill every few days, and that he had been thus affected for about two years. His countenance was sallow, skin cool and clammy, tongue coated, bowels constipated, no appetite. In the perineal region, I found a tumor as large as the fœtal head at term, having a transverse diameter of about five inches, and a vertical diameter of six inches, involving the scrotum and perineum, and projecting forwards between the thighs, so as to interfere with the gait. The perineal portion of this was of a stony hardness; the epidermis covering it was hypertrophied, and, at irregular distances upon its surface, could be seen ten or twelve nipple-shaped protuberances containing patulous or closed orifices of as many urethral fistulæ, some in the process of healing and others discharging pus and urine. These gave exit together to more than two-thirds of all the urine secreted; that which escaped from the meatus, only followed severe straining, and was evacuated in a thread-like stream.

Upon exploration of the urethra, I discovered three distinct strictures—one at the meatus, another, commencing about two and a half inches from the meatus, extending to a depth of two inches in the pendulous urethra; a third in the bulbo-membranous portion of the canal, about one inch in length. All these were extremely dense and resilient, and the deepest was so contracted, that after a filiform bougie was introduced, it was grasped tightly in the canal. The stricture at the meatus was so narrow that it would barely admit with force a No. 9 F. bougie. This I incised at once with a bistoury.

He had been taking large doses of the iodide of potassium, and these had produced an intense repugnance to the drug, which had been administered with a view to producing resorption of the tumor. I ordered him to take the muriated tincture of iron with strychnia, and quinia in quantity sufficient to control the chills. His health speedily improved, though he could walk only with difficulty in consequence of the separation of the thighs, necessitated by the tumor.

I endeavored to enter the bladder with a great variety of instruments; these were all arrested, however, at the deepest of the strictures. After perseverence for many hours (at different sittings) a slender, filiform bougie of whalebone was finally seen to escape from one of the fistulous openings in the tumor; evidently the urethral orifice of this fistulous tract had produced a want of correspondence between the portions of the deep urethra on either side of it. After many fruitless attempts to enter the bladder with this instrument, I told the patient, who was a remarkably intelligent artist, to make the attempt himself in the interval of my visits. He had the good fortune to slip the instrument into the bladder on the 24th of March, and at once summoned me. The patient was fully anaesthetized with chloroform by Dr. Hyde, when we threaded the whalebone bougie (which had been carefully held in place ever since its passage into the bladder) into the eye of Thompson's divulsor, and passed the instrument into the bladder, making use of great force, and yet feeling sure that the divulsor followed the guide. Upon widest dilitation of this instrument the strictures did not split, and as a result the operation was bloodless. We then introduced Holt's divulsor, and no distension that this instrument was capable of making, was sufficient to overcome the resiliency of the contracted portion. As a result of the operation the patient became more comfortable, and much less urine flowed through the fistulous openings, but in three days afterward, we could not pass the smallest instrument into the bladder.

In consequence of the general improvement of the patient's condition, and as there was no special urgency in the case, I deferred operating a second time, until the recovery from the effect of the first was complete. On the 31st of March, after making ineffectual attempts for half an hour to introduce a second time the filiform bougie, it again entered the bladder, and the patient being completely anæsthetized by Dr. Hyde, I again threaded Thompson's divulsor upon the bougie, passed it into the bladder, and fully dilated the canal. Immediately thereafter I introduced Maisonneuve's urethrotome, and completely divided the urethra longitudinally from the meatus to

the anterior border of the prostate gland, when a No. 14 (A) sound was readily passed into the bladder.

The next morning the urine was freely and entirely passed through the urethra, and the patient stated that he had not made water so freely in ten years. From that time the fistulous openings in the perineal tumor ceased giving exit to a purulent discharge, and soon commenced to close; while the tumor itself subsided gradually till at this date, May 21st, it is not so large as a goose's egg and is daily growing smaller. The patient has gained twenty-five pounds in actual weight, and expresses himself as feeling quite restored in health.

His only treatment has been the administration of iron and strychnia, with quinine to counteract the miasmatic element in his case, and the repeated introduction of the steel sound in order to insure the continued permeability of the urethra.

The interesting features in this case, which are worthy of note, are, 1st. The possibility of entering with filiform bougies through a canal which is capable of giving exit to but a small moiety of the urine, and that only in a thread-like stream after expulsive efforts; 2d. The small value of distending instruments in resilient strictures; and, 3d. The patience and perseverance which are required in order to pass even a filiform bougie through a stricture which seems to be impermeable.

ON THE SURGICAL TREATMENT OF UTERINE HEMORRHAGE.

By R. Stansbury Sutton, A. M., M. D., Pittsburg, Pa.

To the general practitioner of medicine, nothing is more alarming than excessive uterine hemorrhage. If it occur at, or prior to, the time of labor, from a placenta prævia, the practitioner recognizes the fact and acts in accordance with established principles. But if the hemorrhage occurs at the regular menstrual epochs, or between them, or if it is rarely absent, and a vaginal examination fails to reveal the cause, the medical man is often discouraged, from the fact that the

cause of the hemorrhage is not apparent. In the last ten years it has been my fortune to meet with many cases of uterine hemorrhage. Fortunately they have all recovered. For the successful treatment of hemorrhage of this character, the first great remedy for the gaining of time, both for practitioner and patient, is a tampon. Tampons may be made of almost any material at hand. Soft linen or cotton rags are often employed. Some prefer sponges. These are often oiled before being packed into the vagina. Tampons of these substances thus prepared have been unsatisfactory to me. The tampon has soon become offensive, and required removal, having a foul odor, and adding to the discomfort and danger of the patient. I adopted, long ago, raw cotton as the best substance for the tampon, and pure glycerine as the best substance with which to smear it. The glycerine may be carbolized, but I do not find it necessary. The manner of making this tampon is as follows: unfold the roll of cotton and tear or cut off with scissors a piece 15 or 16 inches long, and as thick as your fore-arm. With the end of a stout string tie the cotton roll firmly 1½ or 2 inches from either end. With the long end of the string proceed as follows: carry it parallel with the cotton roll for two or three inches, and cast a loop around the roll, and thus continue with the string to the end of the roll, when the last loop should be secured with a knot. The tampon is now smeared with glycerine and is ready for use. How will you apply it? If convenient, Sims' speculum may be introduced. If not at hand, having soaped the index and middle finger of the left hand, pass one or both into the vagina, (the patient resting on her side,) turn the palmar surface of the fingers to the perineum and draw the latter *backwards* and *downwards*. All clots having been removed from the vagina, the tampon is now passed into the vagina, with the index finger of the right hand, along the posterior surface of the fingers supporting the perineum. If the tampon is too large to be entirely received, the redundant portion is pulled out of the string, which is left hanging from the vagina. In removing it, it will come away by traction just as regularly as it was introduced, and, in addition to being free from foul odor,

will, if opened up, be found full of dry cotton. The advantages of this tampon are numerous; 1st. It is soft ; 2d. It absorbs blood very slowly; 3d. It is readily introduced; 4th. It is easily removed; 5th. It does not become foul; 6th. If congestion of the uterus is the cause of the bleeding a free drain of serum from the engorged vessels is set up, and soaks into the tampon, and it is therefore in such cases what no other tampon is, viz., *curative*. If, however, it is the choice to prefer some astringent in addition to the glycerine, my habit has been to apply to the mouth of the cervix a bit of cotton, well saturated with a solution of fluid extract of matico and glycerine, and then to apply the tampon in addition. Iron as a styptic is very effectual, as we all know, but it is objectionable for many obvious reasons in these cases. In addition to a good tampon in many cases, Barnes' water bags, sponge and laminaria tents are required to open the way to exploration of the uterine cavity.

In April, 1867, I was called to see Sarah, a colored servant. She was lying in a bed saturated with blood, almost pulseless, tongue pale and flabby. Her age was 48 years. For three or more years she had been occasionally the subject of these bleedings, but until now had been content with the thought that she was undergoing the change of life. An examination revealed a large fibroid polypus attached to the posterior lip of the uterus.

I ordered ergot and stimulants in liberal doses, and tamponed the vagina with soft linen cloths pushed in about the polypus. On the following morning I carried a silver wire, armed with Gooch's canula, around the neck of the polypus and strangulated it. Thirty-six hours later I severed the neck of the polypus below the wire with the scissors and removed it. Nourishing broths, and good nursing with tonics, gradually restored this woman's strength, and several months later I saw her in the city. Dr. E. S. Umstedter assisted me in the removal of the growth. A year after the operation, this woman developed cancer of the breast. She refused any operative procedure until the axillary glands became enlarged, after which I declined to operate. The operation, however, was

done by another, and she died a week afterwards. Gooch's canula and wire have given place to the wire écraseru and galvano-caustic loop, both of which are among the improved surgical instruments.

In the latter part of November, 1871, I was called to see Miss Mc., aged 20. She was a girl of large frame, but emaciated and anemic. She had been confined to bed for several weeks, and her medical attendant had been stricken down with fatal disease. Her history was as follows: At 15 her menses appeared; until eighteen she menstruated regularly and was very stout and active. At this date she found the flow increasing, and her periods less frequent; at the end of a year she had periodical floodings. For two years she has passed almost half her time in bed, and is rarely free from some bleeding. On several occasions during the last year, tampons were required to save her life. On examination, the uterus is very much congested and heavy, the cervix is large and the os patulous; some blood is oozing from it.

The sound passes in 2⅞ inches, and its introduction is followed by an increase in the flow. The feeling imparted through the sound is that of a rough, velvety surface. I passed into the patulous os a number of sponge tents; upon the removal of these I was able to pass the finger into the uterus, but from the uniform spongy feeling was led to believe that the uterus was lined with granulations, fungous, or, as I may say, polypoid in character. A large button of nitrate of silver was fused upon the end of a platinum probe, and while the mother held Sims' speculum, I cauterized the entire lining membrane of the uterus. When the slough separated, the hemorrhage was so great as to require a tampon to arrest it. Next in order during the winter of 1871-72, I tried styptics of every variety, and in March, 1872, hoped I was near the end of the trouble. The temporary relief was followed in May by a severe hemorrhage, which again put the patient to bed. I now again dilated the cervix, and explored the cavity of the uterus. Nothing new was elicited, but with Sims' curette I scraped out a number of small mucous polypi and rasped off the granular surface; to the now denuded surface I applied undiluted solution of the persulphate of iron. She recovered

from this harsh treatment, and remained free from hemorrhages for a year. During this time her health improved very greatly, but she complained much of prolapsus, and was relieved with Hodge's pessary.

In November, 1874, I was called to see her again. She was in bed, and had just gotten over a prolonged and bloody menstruation. I again scraped out the uterus with the curette, this time finding several mucous polypi. On the third day afterwards, she left her bed on the first floor, in stocking feet and night-gown, and went to the third story for some article she wanted. The day following she had a chill, followed by cellulitis and abscess.

In due time the latter bursted, and she recovered by April, 1875. Having spent the summer in a country district, and taken a course of chalybeate waters, she married, Jan., 1876—thirteen months from the date of the second scraping with the curette. From the date of marriage until Dec. 30th, 1876, she was regular in every particular, when the menstruation ceased. Yesterday I was engaged to attend her in her approaching confinement.

In July, 1873, I was called to see Mrs. M. She was nursing a babe, about three or four months old. She was in bed, very pale and feeble. She said that blood had been "coming and going" from her womb for three weeks. A vaginal examination revealed no cause for it, and I introduced a sponge tent into the cervix. Ten or twelve hours afterwards, I removed the tent, and found in its meshes the remains of a mucous polypus. Believing this might be all, I waited. No further bleeding occurred.

Mrs. H., the mother of two children, called at my office, with her husband, in the summer of 1875, to consult me in regard to her health. Without doubt, her symptoms were those of pregnancy, and she admitted having felt motion, but said she was "unwell every three or four weeks." Her youngest child was 14 years old. She had morning sickness; the areolæ about the nipples were dark; the breasts were enlarged. She had frequent calls to empty the bladder, and leucorrhœa had annoyed her for six or eight weeks. Bi-

manual palpation with percussion, demonstrated an enlarged uterus, with the neck soft and apparently shortened. A speculum was now introduced. The vaginal mucous membrane was red, its rugae enlarged, and in the furrows a white opaque secretion, of creamy consistency, was apparent. But why did she bleed? Withdrawing the cylindrical speculum, I placed her upon her side, and inserted Sims' speculum, trusting her husband to hold it. I seized the anterior lip of the os with a small tenaculum, and, drawing down the cervix, observed a small pear-shaped polypus projecting from the os. It was now seized with a pair of fenestrated forceps, and its slender pedicle twisted off, when a second one was revealed and treated in the same way. These polypi were not glandular or mucous in character, but were abundantly supplied with cellular tissue and vessels. After this date, she did not have any further bleeding, and, at full term, I attended her in her confinement. Her child was a male, and weighed ten pounds.

Miss W. came under my care in the winter of 1871–72. The pelvis was filled with a sub-peritoneal fibroid tumor. Her menstruations were profuse and painful. After considerable trouble and time, I succeeded in dislodging the growth from the cavity of the pelvis. In the April following, the uterus measured in depth 5½ inches. Repeated sub-cutaneous injections of Squibb's extract of ergot, and the maintaining of the organ as free from flexion as possible, by appropriate pledgets of glycerized cotton, which not only assisted in supporting the organ, but drained it constantly, resulted in complete control of the hemorrhage. The uterus, a month ago, was but 2¾ inches deep, and menstruation was normal, notwithstanding the fact that the fibroid still exists, though much reduced in size.

Mrs. W., from a neighboring state, consulted me in April, 1875, on account of severe uterine hemorrhage, occurring irregularly. She was 50 years of age, and very large. The uterus was 7 inches deep, and attached to it was a very large sub-peritoneal fibroid tumor. She was ordered Squibb's fluid extract of ergot, and muriate of ammonium. A year later, she sent for me to see her in this city. She had been benefited by the former pre-

scription, but still carried her large tumor. She declined to allow me to measure the uterus. A few weeks after, I was summoned to her in haste, but did not reach her for 12 hours, when I found her exhausted from loss of blood. A medical brother had tamponed her, and doubtless saved her life. I removed the tampon, cleaned out the vagina, and introduced a second tampon. Six or eight hours afterwards, the bleeding began again. The tampon was removed, the uterus found to be 5 inches deep, and losing blood slowly but constantly. A stream of cold water and vinegar was played against the cervix for a few minutes, followed by pure water. Some slight abatement was apparent. I now determined to stop it promptly, and, taking a long urethral syringe, bent its nozzle over the gas, to the proper curve, and filling it with a solution of persulphate of iron, carried it about 4 inches into the uterus and discharged its contents. Not another drop of blood appeared after its withdrawal. For several weeks she took salines and iron, with broths, milk and albuminous substances, and gained strength and flesh. Frequently, I have incidentally met her since, but although a year has passed, she has not had another hemorrhage.

In two cases of menorrhagia, caused by sub-peritoneal fibroids, the vaginal portion of the cervix has been slit up, bilaterally, with great relief to the patient. Whether tension, and consequently irritation, is thus relieved, I leave the reader to judge. The fact remains that it is a remedy in these cases.

In December, 1875, a lady from a Western State came to Pittsburgh on account of severe metrorrhagia, which had been of long duration. The uterus could be felt enlarged. The cervical canal was narrow and long. A sound proved the uterus three inches deep. The cervix was fully dilated with sponge tents, and a small submucous fibroid was enucleated. Her subsequent menstruations were normal.

Recently this patient writes me that her trouble is returning, and it is probable that the cause is another small fibroid.

In March, 1877, Mrs. D. consulted me on account of an irregularity in her menses. She did not complain so much of the loss of a great quantity of blood, as on account of the

tardy disappearance of the flow, and the fact that it returned after apparent cessation. She had been married several years, and had no children. The cervix was very long and hard, and the os small. I slit up the cervix bilaterally to the vaginal attachment, and cut off with scissors the divided sides of the cervix. To one of these pieces I found attached a mucous polypus which probably accounted for the trouble. Since then she has menstruated naturally. The operation has left the os more open and made her more liable to pregnancy.

May, 1877.

Clinical Reports.

COOK COUNTY HOSPITAL.

Services of DR. H. A. JOHNSON.

(Reported by DR. PARK, House Physician.)

Lead Poisoning.

CASE I. Lizzie C., aged 21, domestic. Admitted March 5th, 1877.

For three years she was in the habit of using the cosmetic known as "flake white," being ignorant of its deleterious properties. Has never been very robust, though enjoying ordinary good health in spite of attacks of scarlatina, typhoid fever, and trivial troubles, along with backache, leucorrhœa, and other disorders peculiar to her sex. One year ago, while suffering from typhoid fever, during the early stages of which she was salivated, she noticed sudden pain in hands and arms, followed by inability to use the hands. Recovery from the fever was not followed by return of manual power, though at times there has been partial improvement.

On admission she is evidently laboring under some cachexia; bowels are costive, tongue with a heavy white coat, appetite very poor. There is the characteristic line along the gums, marked fetor of breath, and paralysis of the extensors of both hands. There is considerable gastric irritability, with a

feeling of oppression over hypogastrium; her menses have been absent for four months.

The treatment at first consisted of magnesium sulphate ʒss, sulphuric acid dil. fʒss, ter in die, with anodynes and carminatives as needed. Since her admission the treatment has been changed to nitro-muriatic acid, and again to potassic iodide. There has been a gradual amelioration of the symptons; the menstrual flow is now regular; the other excretory functions performed with ease and regularity. She has gained in flesh and spirits. The only vestiges of her former trouble are a faint line about the gums, and the drooping hands, which she has not yet the power to raise. The treatment to-day (Aug. 5th,) consists of tonics, sulphur baths and the induced current.

Case II. Susie A., a cyprian, aged 19. Admitted August 1st, 1877.

The history of this case is very similiar to that detailed above, the cosmetic used being the same, the period of its use only one year, and the method of applying it being to mix the powder with glycerine. The onset of the symptons was also similar, lassitude, weakness of the limbs, pain in the same, obstinate constipation, and paralysis of the extensors of the hand.

On admission; she is poorly nourished, skin sallow and clammy, functions of alimentary canal deranged, limbs almost useless, drooping hands, blue line about the gums, pulse 126 and small.

She was given a general tonic treatment of strychnia, mineral acids and bitter tonics, and the sulphate of magnesium as an eliminant.

Within a week she has manifested some improvement, but the time has been too short to warrant anything but a favorable prognosis.

Mercurial Erethism.

Henry B., native of Belgium, aged 18. Admitted June 21st, 1877.

For six months patient has been employed in a looking-

glass factory, constantly handling the amalgam and exposed to its noxious influence. About six weeks ago he began to have severe headache, and his muscles to become very tremulous. Soon after appeared a profuse papular eruption over the whole surface of his body. His gums then became tender and mastication difficult. On admission; is well nourished, appetite and sleep good, tongue clean and moist, bowels regular, urine normal, skin natural. He complains of pain in the head; and the muscles of the extremities are in a peculiarly tremulous condition whenever he exerts them, and they have lost some of their tone as shown by the use of the dynamometer. The breath is not fetid, there is no salivary flow, and the gums only slightly altered in appearance.

He was given a sulphur bath every day, potassic iodide as an eliminant, and laxatives and anodynes as needed.

He made a rapid improvement as far as the muscular tremors were concerned, but as these symptoms wore away he began to show symptoms of hysteria, and slight, and finally acute, mania. Now (on the 7th of August,) he appears as stout and vigorous as could be desired; his muscles are firm, there are no tremors, the gums are no longer sore, the appetite is good, and he is the picture of health. It is only seldom now that he gives way to the crying fits and delusions which so troubled him two weeks ago.

RUSH MEDICAL COLLEGE CLINIC.

Service of Prof. Moses Gunn.

(Reported by Edmund M. Landis, M. D.)

Lateral Curvature.

C. F., German, aged 15, is a poorly nourished lad, whose appetite is good, but who eats sparingly of fats. He states that he was well up to four months ago, when he first noticed pain in his right side, which began to be crooked, and that his breathing was embarrassed.

On examination, find a lateral curvature to the right side, and a prominence in the dorsal vertebral region. On stooping, at request, to pick up an article from the floor, he bends over with ease and freedom. This little experiment at once dismisses the suspicion of disease of the vertebræ, and we have lateral curvature resulting in a corresponding angle at the back, causing the suspicious prominence noticed at first. The respiratory movement of the chest seems good, yet the patient complains that he cannot breathe well. On making pressure on the chest, find that we can materially restore its natural shape.

The question, in this case, is whether we shall advise the usual apparatus, or suspension by the arms and hands from a swing. [See a paper on suspension as a means of treatment in Spinal Distortions, by Benjamin Lee, M. D., of Philadelphia, read before the last meeting of the American Medical Association, by Dr. Frank Woodward, of Philadelphia.] We have a case under treatment for whom a modification of both apparatus and swing is being used. The patient had double lateral curvature, and the bowing in on the left side was so great that the chest could almost be spanned with the fingers. The respiration of the left side was much embarrassed. The only means of treatment had been a stiff corset, which tightly compressed the chest. An apparatus was made for this patient, the essential features of which were a pelvic band or girth, a part which corresponded to the natural curve of the spine, and armlets or crutches to support the arms, and to keep the shoulders back. This made no pressure on the chest. With this, the child was put in the swing and made to frequently inspire and expire as fully as she could. Full diet was ordered.

That child has steadily improved, the curvature is being reduced, and the embarrassed breathing relieved.

In this case we would hardly recommend an apparatus, as a swing would be all sufficient.

Epithelioma.

J. B. W., aged 58, German, farmer. The patient, whose previous health had been good, states that he first noticed, some two or three years ago, in the right side of the mouth, close to the gums, a small whitish looking, painless ulcer, which he thought to be a simple sore. This not disappearing he consulted a physician, who treated it for sometime without success, and finally cauterized it. After this the sore began to spread, ulcerate and pain,—the pain being of a sharp, shooting character. He had several teeth extracted, hoping by their removal to gain some benefit. The sore continued to enlarge and spread. Three months ago he consulted a physician, who pronounced the disease carcinoma.

On examination, find an infiltration in the right cheek, extending within and without, covering an area of about two inches, and approaching the angle of the lips. It is fixed, immovable and ulcerated internally and externally. The gums about the disease, and also on the opposite side of the jaw, present a number of whitish looking deposits, or patches. There is some pus, but no ichorous discharge. The alveolar process is involved, and we find it softened, broken down, and filled with sinuses, the disease also spreading to the soft parts on the inside of the mouth. On probing with several probes in different directions, find that one of them passes clear through the cheek, and alveolar process to the side of the tongue.

We have here an example of epithelioma a little out of the general type. Its advent, progress and present appearance, are singular. It began in the duplicature of the mucous membrane just where it begins to be reflected upon the gums, commencing, as is now observed, with a thickened condition of the mucous membrane, as a number of patches of a snowy white appearance. Epithelioma does not usually begin in the mucous membrane as a white degeneration. Seen at the first glance, one would call it a diphtheritic deposit, but on examination find it a part of the mucous membrane. The patient complains of a soreness which is characteristic of pus, and pus is found, but the ichorous discharge which we would expect is

absent. The characteristic pain is present, and the disease is apparently spreading to the opposite side.

If an operation were made it would be necessary to remove the whole of that part of the jaw involved in the disease, and we have examined the case with reference to this, and find that a section made through the symphisis menti, and another as far back as the first molar teeth, would accomplish the object.

The large amount of the soft parts of the cheek which would be involved in the operation would make a gape, that would be difficult to close. But even if we were successful in this, on account of the liability of a disease to return, which has progressed so far and attained to such a degree as this, we cannot conscientiously recommend the operation.

We inferred that in the first stage of this disease the whitened condition of the mucous membrane was singular. This is not the case in the later stages. Remember having removed an epulis, where the patient came back after a few weeks with a return of the disease, when this same whitened thickened condition of the mucous membrane was present.

NOTES FROM PRIVATE PRACTICE.

The poisonous effects of arnica.

Mr. L——, a healthy gentleman, of excellent habits, and with no specific cachexia, slightly injured his knee by falling on the sidewalk, while attempting to reach the street cars. Partly to quiet the pain, and partly to follow a very fashionable and orthodox custom prevalent among a majority of the people, he purchased at one of our best drug stores, a two-ounce bottle of tincture of arnica, the contents of which he applied to the knee. In this application no particular attention was given to the quantity used, and some of the tincture trickled down the leg, and a small amount of it came in contact with the fingers, especially between them. During the night the affected limb, swathed in a cloth saturated with the arnica,

came in contact with the inner part of the other leg, and at some time, probably while applying the lotion in the evening, the patient's fingers came in contact with his eyelids. In the morning every part of the integument which had been touched with the arnica, was slightly red and swollen—erythematous. I was immediately summoned, October 17th, and ordered salines, a cooling lotion and rest. 18th, swelling and redness increased—some fever. 19th, vesicles between fingers and upon left knee. 20th, vesicles upon portions of all the integuments (except eyelids) with which the arnica had come in contact—eczema. 22d, eye nearly well; integuments less swollen; considerable itching and burning; pustules around the margins of affected parts. 23d, intense itching and burning of the surface of the thorax and abdomen. An examination showed a profuse redness or vascular congestion of the entire surface, and the presence of what Wilson would probably call eczema erythematosum. 24th to 28th, eruption on body disappearing; crusts forming on leg; fingers nearly well. 29th to 31st, crusts clearing; pruritus disappearing; new skin looking healthy; patient discharged.

This gentleman, without doubt, from the external use of the arnica, had an acute eczema running through the different stages of hyperæmia, increased sensibility, infiltration, vesiculation, incrustation and degeneration, terminating at about the usual time. The constitutional disturbances were greater than is usual, as was shown by the eczema erythematosum, which took place the sixth day, and by the excoriated and ulcerated patches which continued for two or three weeks after his discharge. I should mention, perhaps, that some two or three years ago, I treated the same gentleman for a slight eczema on the hand, and it is perhaps in these people who have, as it were, an eczematous diathesis that this unusual susceptibility of the skin is present. Until this case occurred, in my own practice, I was ignorant of the fact that arnica applied externally ever produced poisoned effects. I considered it a domestic remedy used very generally without the advice of a physician, and supposed it perfectly harmless. I find, however, that Fox, in speaking of medicinal rashes, says, "Arnica may produce erythema and swelling of the part to

which it is applied, or it may excite a real eczema." And Hebra, in his article on erythema nodosum, speaks as follows: "Some medical men, however, suppose that the tincture of arnica is a perfectly harmless remedy in erythema nodosum, and in similar affections. But I would give a friendly warning to those who advocate its use, unless, indeed, they propose to use it homœopathically, and in infinitessimal doses. In the proportion of a drop of the tincture to a pail of water, this substance may certainly be applied without any risk of doing harm. But I have in practice had abundant reason to observe that the tincture of arnica, even when much diluted, acts most injuriously upon the skin of some persons. I have frequently seen eczema or dermatitis excited by the assiduous application of lotions containing this drug in the treatment of slight bruises or sprains." In the *Medical and Surgical Journal*, of Boston, Jan. 21st, 1875, Dr. Jas. C. White reports three cases, somewhat similar to mine. His patients had received injuries of some severity, and following the ancient and honorable custom, applied arnica, which in every case produced hyperæmia, vesicles, etc., in regular order. In view of the universal belief of the harmlessness of this drug, it seems best to place on record well attested facts in regard to its poisonous effects on, at least, a certain number of those who use it.

CHAS. W. EARLE, M. D.

No. 37 Park Avenue.

Atresia Vaginæ with Retention of the Menses.

Mrs. H. came under my observation thirteen months after the birth of her first child. The attending physician in her confinement found the hymen unruptured, and he could only, with great difficulty, force the index finger into the vagina.

The labor was natural, and in its progress the hymen was ruptured without any interference.

The patient made a good recovery; no sloughing or other bad symptom followed, and the lochia, which was not very abundant, ceased in ten days. About the ninth month after delivery, she had all the symptoms of menstruation with the exception that there was no discharge.

A month later, there was again the menstrual molimen present, with pain and more general disturbance. With each succeeding month, the pain increased and was, as she described it, like colic. The pain, each time, was caused probably by the distention of the vagina, and the contraction of the uterus in its efforts to expel its contents. She suffered but little inconvenience during the intervals between the menstrual periods. Examination of the patient, four months after menstruation began, disclosed a small tumor as high as the umbilicus, which proved to be the uterus. Upon attempting vaginal examination, I found the opening occluded just within the internal labia. Inspection disclosed a firm star-like, or radiated cicatrix at the site of the hymen, or caruncule myrtiformes. Further examination per rectum disclosed an elastic tumor, impinging upon the rectum and extending upward, beyond exploration in that direction.

There was no doubt as to the correct diagnosis of the case. The vagina had been hermetically sealed by the reunion of the forcibly ruptured hymen. The accumulated menstrual flow had distended the vagina, and pushed the uterus up out of the pelvis.

The following plan of treatment was pursued. Having introduced a catheter into the bladder, and the index finger of the left hand into the rectum as guides, a trocar and canula were then pushed through the center of the cicatrix, into the distended vagina. On the withdrawal of the trocar, there began to flow through the canula, a thick black fluid, resembling tar or treacle. The canula was then removed, and the opening dilated; first with one finger, then with the index finger of each hand, the force being applied in opposite directions. The contents were soon discharged through the ample opening with aid of a little pressure over the abdomen.

The vagina was then washed out with a weak solution of carbolic acid and warm water. The parts were kept from contracting by the introduction of a good sized glass pestle, which was retained in situ by a T bandage. The patient made a good recovery without one bad symptom. There is a question as to the safest method of discharging the retained men-

ses; whether at once by full, free opening, or by a small one, permitting the fluid to dribble away *guttatim*. The discharge of this fluid is by no means unattended with danger, as death has followed the operation for relief of retention, caused by an imperforate hymen. The different methods of operating by free incision, or forcible dilation, to prevent contraction and reclosure, have each their advocates. In this case forcible dilation was followed by little tendency to contract.

Olina, Ill. T. J. MAXWELL, M. D.

A Case of Belladonna-poisoning—Recovery.

August 3d. Was called about 10:30 A. M. to see Corda R., aged 3½ years. When I arrived the child was apparently sleeping soundly. Pulse, 130; respirations, 20 per minute; the entire surface of the body was covered with a very bright scarlatinal eruption, with occasionally livid spots of variable size. Upon lifting the eyelids, found the pupils dilated to such an extent that only a very small circle of the irides remained visible.

The mother stated that the child had a chill on the day previous, and that she had given a large teaspoonful of quinine mixture, (quinine sulph. ℥j, syrup glycyrrhiz. ℥j) at 8 o'clock, to prevent the recurrence of the chill. In a few minutes after taking the dose the child had vomited slightly, and in less than an hour after she commenced having spasms, which continued, alternated with periods of repose until my arrival, two hours and a half later.

Upon examining the supposed quinine mixture, it proved to be fluid extract of belladonna, which the mother had used locally, some time prior to this, for the purpose of suppressing a threatened mammary abscess.

The diagnosis being settled, I gave the patient a teaspoonful of ground mustard, mixed with water, repeating the dose in a few minutes, but the imperfect deglutition rendered the administration very difficult. It was followed, however, in a short time by rather imperfect emesis. I then determined to test the antidotal powers of opium.

At 11 A. M. injected $\frac{1}{8}$ grain of acet. morph. hypodermically in right arm, and gave a teaspoonful of a strong solution of tannic acid by the mouth every half hour. Patient slept soundly directly after the injection, except frequent slight subsultus, and the slightest touch on the finger tips would produce profound digital flexion. Pulse 126, during sleep; 2 P. M., patient aroused voluntarily, talks a great deal in a thick, gruff voice. Rash entirely disappeared. Right pupil slightly contracted; left very large; very restless; injected $\frac{1}{12}$ gr. acet. morph. in left arm; continued solution of tannin.

4. P. M. Very restless; wants to walk about, but is unable to stand alone, becoming delirious, laughing wildly one moment, screaming and clutching with fright the next. Muscular incoördination in reaching for anything. Will overreach or fall short of the object; has lost all idea of distance; power of articulation destroyed. Tongue appears greatly swollen.

Rash has appeared again over the entire body, more marked at flexion of joints. Pupils intensely dilated; morbid sensitiveness to sounds and objects; is terribly frightened at objects lying about. Afraid of visitors, shrinking from them and screaming wildly; insatiable thirst; motions and calls for water incessantly, but swallows it with difficulty.

6 P. M. No better; injected $\frac{1}{8}$ grain acet. morph. in right arm.

8 P. M. Fully under influence of last injection; resting, except occasional tossing and rolling about; subsultus tendinum when quiet; pulse, 130.

10 P. M. Aroused patient—still wild and grasping at everything. Pupils slightly contracted, with diverging strabismus. Pulse, 128; respirations very slow; allowed patient to sleep again.

At midnight patient sleeping soundly; pulse, 126: respirations quite slow, with crowing sound on inspiration; becomes very rigid when aroused; relaxed when sleeping; rash disappeared again, giving solution of tannin every hour; roused the patient occasionally until 2 A. M., when she awoke—Talks much; articulation more distinct; calls constantly for water; gave olei olivae, olei ricini, āā, a teaspoonful

every hour; discontinued solution of tannin and injected $\frac{1}{12}$ gr. acet. morph. in left arm.

4 A. M. Roused up and passed a large quantity of dark colored urine; pulse, 115; profuse perspiration with warm surface; remained about the same until 8 A. M., when the bowels operated freely.

10 A. M. Patient roused up much improved; disposed to play; pupils almost normal, dilating readily in the dark; contracting tardidly, when exposed to light; voice nearly normal; pulse, 96.

12 M. Twenty-eight hours after taking the belladonna all traces of it have disappeared; pulse, 90; pupil normal, but dilating readily; everything appears to indicate a rapid and permanent recovery.

Oakland, Ill. J. D. WHITLEY, M.D.

Editorial.

SCIENCE AND POLITICS.

In our issue for October of last year, we published a somewhat extended editorial notice of the Chicago Botanical Garden, in which, speaking for the medical profession of the city, we expressed our satisfaction with the work already accomplished by the Directors, and commended the object they had in view to all who were interested in the study of science.

Since that date, those who have visited the south-eastern corner of the northern of the two south parks, have noticed with pleasure the labor expended in the cultivation of the more than one thousand beds—fifteen acres—of plants arranged in their natural order, as well as the luxuriant development of the flora in the four hot-houses.

And here we have to present the resolutions lately passed by the Board of South Park Commissioners, which are subjoined:

WHEREAS, The great stagnation in all industrial enterprises of our country has made taxation at this time specially burdensome, therefore

the Commissioners called for a smaller sum of money for park purposes than the Board had done in former years, rendering a corresponding curtailment in our expenditures absolutely necessary; therefore,

Resolved, That the further operations of the Botanical Department are hereby suspended, and the garden placed under the general management of the Floral Department of the park, with direction to the Superintendent to take charge of and preserve all its valuable plants, flowers, seeds, and other property, until a change in the times shall warrant this Board in expending the necessary means to carry out such an enterprise.

Resolved, That the Secretary is hereby instructed to send a copy of this preamble and resolution to the President and Directors of the Botanical Gardens, and to express the thanks of this Committee to the same, and particularly to Prof. H. H. Babcock for the great energy and skill manifested by him, as well as the regrets of this Board at being obliged to suspend their good work.

To this summary action of the Park Commissioners the gentlemen entrusted with the management of the Botanical Gardens have filed the following protest:

CHICAGO, August 6.—The undersigned, who were invited and appointed by the Board of South Park Commissioners to undertake the establishment, management, and direction of a Botanical Garden in the South Park, do hereby earnestly protest against the action of the said Board as set forth in the preamble and resolutions copied above, for the following reasons; viz.,

First. Because said action was taken at a meeting from which we, as well as the public and reporters for the press, were excluded.

Second. Because we have reason to believe that said action was not, as stated in the preamble, based upon considerations of economy in the expenditure of public money, but is the result of machinations whose object has been the defeat of the enterprise, against which we have been obliged to contend from the inception of the Garden, and which the Board has taken no efficient means to prevent.

Third. Because said action, though nominally a suspension, is virtually the abandonment of the Chicago Botanical Garden as a scientific establishment.

Fourth. Because such action of the Board in appropriating to general park purposes material solicited and contributed for scientific uses, obtainable from no other sources, and by no other means than those adopted, is a gross breach of faith and honor, rendering us powerless to fulfill the promise, made with the approval of the Board, to make returns in kind for the contributions we have received from all parts of the civilized world, and for which it is impossible for the Board to render an equivalent.

Fifth. Because we regard said action of the Board of South Park Commissioners as a serious blow to the advancement of science in Chicago and the Northwest—a bar to the inauguration of any similar enterprise in

our section, and a blot upon the fair fame of our city and country; so that hereafter no resident of Chicago can visit the galleries of other countries without a blush of shame at the ignoble termination of our own, after the expenditure of so much money, and when in the full tide of successful progress.

H. N. HIBBARD, WILLIAM BROSS,
H. H. BABCOCK, E. H. SARGENT,
A. E. EBERT.

No part of the protest filed by the Directors of the Botanical Garden deserves greater consideration than that which describes the evident breach of faith and honor, which the discontinuance of the Garden necessitates. The existence and remarkable development of the latter, has been rendered possible only by an adoption of the most generous system of exchanges on the part of numerous foreign institutions as well as individuals who, in many cases, were ready to wait for a return till the Chicago enterprise had become fully established. The truth is that the Chicago Garden has found some of its warmest advocates and friends outside of its own home. And what is the deplorable result? A deliberate repudiation of obligation, a repudiation, precisely such as those to which the foreign capitalist is disposed to make a pointed reference, whenever he is solicited to invest in American securities!

Let us look such contingencies as these squarely in the face. The little lesson we have to learn and impress upon the scientific world is this, that in a Republic such as ours, art, literature and science can never flourish under the protection of political influence. However brilliant may have been their conquests under the patronage of such men as the Princes of Florence, the Louis of France, and even the Pontiffs of the conservative Church of Rome, we must admit that in this country the upas-tree of "politics" casts a deadly shadow upon that which aspires to bloom beneath its branches. What species of fruit has ripened to maturity beneath its shadow in the past? In the field of literature we can point to the various government reports, which are generally sold for waste paper; and the two latest productions of the pen of the American politician, "Why we laugh" and "How to play poker." In the art studies of the government, we have to be

satisfied with such grotesque absurdities as can be seen in the rotunda of the National Capitol. Look at the bold design impressed upon the coins of the country; analyze the architectural effects in the average government building, and in what respect has science been benefited by its occasional sustentation by the state? The Agricultural Bureau, according to the *New York Nation*, of August, has been "for years, the laughing stock of the newspapers" of the land. Fortunately for the name of the medical profession in this country, the general suspicion of political influence has never menaced the Surgeon Generals' Office at Washington, and the results have been correspondingly superb. The latest production of politics in medicine is the recently published Government Report on the *Cholera Epidemic of* 1873, and of this work it is scarcely necessary to remark that when Dr. Max von Pettenkofer finished with it in the London *Practitioner*, (Feb. and March, 1877), the only part of it left was the tail—Dr. Billings' excellent Bibliography.

We have no objection to urge against the constitution and functions of our own newly-organized State Board of Health, being unwilling to obstruct its first steps by adverse criticism, but content ourselves for the present, with remarking that in general, an alliance between medicine and the state has resulted, at least in this country, disastrously to the former.

We cannot, therefore, but deplore the issue in the matter of the Chicago Botanical Garden, regarding it in the language of the protest, as a "blot upon the fair fame of our city and country." Let us, however, learn the lesson well. With us, science and politics must be eternally divorced. For the children of such a union will be suckled, like Romulus and Remus, by a she wolf—a wolf that resembles the *lupus exedens* of the pathologist, in that it is ready to destroy all the beauty and excellence to which they may aspire.

The Illinois State Board of Health is now issuing licenses to the physicians of this State, according to the new law, which was published in our last number. Many physicians misunderstand the scope and intent of this law, which we wish might

have been a better one. The various western States are agitated over special legislation on the subject of our profession. Doctors are greatly divided in their opinions as to the feasibility of any special legislation for themselves. Some contend that no law is needed to regulate the practice of medicine and surgery. Others as stoutly clamor for protection against charlatanism. It will not be five years before every western State will have a medical bill. California has the best of those we know, and it seems to work well. Illinois has one now, and we must make the best of it. Many of our Illinois physicians seem not to understand it.

They feel astonished that *physicians with diplomas* should be passed upon by a Board created by law; they feel rebellious, pugnacious. Some Doctors insinuate that the Colleges are the gainers by this law. Some urge one objection and others urge another, while but few seem to comprehend the wonderful advantages resulting from this law, imperfect as it is, which are these:

A. This new law gives all educated physicians the power to protect themselves and elevate the standard of the profession, which they never before had. In less than twelve months every County Clerk in Illinois will have recorded the license of all physicians practicing in his county. Every new comer can be investigated, by any man choosing to ascertain if the former is registered, by inspecting the County Clerk's record. If he be registered, well and good; if not, the County Attorney, in obedience to instructions from the State Board, will prosecute the new comer, who must show that he is a graduate, or "move on." Thus the profession can keep out of Illinois all uneducated, ungraduated men.

B. After January 1st., prox., physicians, in collecting fees in courts, must show that THEY are law-abiding citizens, in that THEY have qualified by conforming to the laws of the State—in short, that they are licensed practitioners of medicine and surgery. Failing in this, they will suffer immensely in their suit and be greatly embarrassed.

C. All advertising specialists and traveling quacks can be suppressed, by licensed physicians entering complaint to the

State Board against them, alleging that they are violating the "code," and the Board will at once recall licenses issued to those thus giving offense. As long as the earth stands there will be charlatans, and no law can be framed that will completely annihilate them. Quacks are such by NATURE. Doctors must always expect to be pestered by this sort of vermin. This new law places in our hands, *for the first time in our State history*, the possibility of dealing summarily with all forms of quackery. The "codes" of all schools are agreed as to what is "professional conduct."

From the foregoing, it can be seen that if the profession throughout Illinois will cheerfully come forward and array themselves on the side of law and order, give their hearty and united moral support to this Board of Health, the standing of physicians will be greatly enhanced thereby, and they only will be the gainers. On the general principle of opposition to special legislation, the Colleges, so far as is known, were opposed to the bill, and the fact that eight separate medical bills were introduced in the legislature last winter, and but *one* (and an imperfect one) passed, shows that there was no endeavor on the part of Colleges to secure the enactment of this law.

The best method for Illinois physicians to pursue, is to comply with the law, by sending to the President of the Board, Dr. J. H. Rauch, No. 202 State Street, Chicago, for a blank affidavit, and executing it at once. If the physician has *not* practiced in Illinois ten years, he *must send his diploma with the executed affidavit* to some member of the board, accompanying it with the license fee of one dollar ($1.00), and he will, in a few days, receive his diploma and certificate in due form and order. While it is not necessary for practitioners of over ten years standing to send their diplomas with their affidavits, still it is better to send their parchment in, so that they can be *recorded* as physicians with diplomas. It places them in a better light before the public and gives them a higher standing.

Any physician having practiced in Illinois more than ten years, will save trouble by sending his certificate. The ten year clause in the law *does not absolve any physician from*

making affidavit. The Board, fortified by the opinion of the Attorney General, will, after January 1st, 1878, *compel* every old practitioner who claims exemption by the ten year clause, to make affidavit that he has practiced ten years. The Board does not *know* that A, B, or C, has been in practice ten years or longer; it *knows* only what is corroborated by affidavits. Thus it will be seen every practitioner has to comply with the law. The Board now *asks* every doctor to comply with the law. After January first proximo, it will *demand* what is now *asked*, and, not receiving it, will inflict the penalties. Now is the time for the profession in this State to rise in their might and unite against quackery in all of its forms. It can successfully be done by nothing short of a united front, and combined effort and determination.

Correspondence.

LETTER FROM EDINBURGH—MR. LISTER AND HIS ANTISEPTIC METHOD—HIS REMOVAL FROM EDINBURGH TO LONDON, AND ACCEPTANCE OF A POSITION IN KING'S COLLEGE.

To the Editor of the Chicago Med. Journal and Examiner:

Whatever may be the opinion of the profession at large, as to the merits of Mr. Lister's ideas on the subject of his antiseptic treatment in surgery, he has certainly achieved an enviable reputation at home.

Even the emperor, Dom Pedro, during his flying visit to this city, paid him the compliment of calling at the infirmary to witness his antiseptic dressings, as applied in the wards.

As your readers are probably aware, Mr. Lister has lately accepted a position at King's College, London, and will sever his connection with the University of Edinburgh at the close of the present term, and will then move to London, and make that his permanent residence.

As the school to which he goes is much smaller than the one here, and the number of beds of which he will have charge

fewer than those he here controls, some surprise has been expressed by his friends at his accepting his new position.

His reply is that he hopes in London to be able to diffuse more widely his views on the germ theory of the contamination of open wounds after surgical operations.

Though his practice here is a very lucrative one, having inherited a large fortune from his father, he is able to leave out of the question the matter of money in his contemplated move.

He claims that the reason why such varied results are obtained by those who attempt to practice antiseptic surgery, is that some are not sufficiently imbued with its importance to carry out its teachings in all their minutiæ, and that a certain other number attempt its practice without being sufficiently well informed on the subject to be able to operate as he directs.

As an illustration of the latter class, he mentioned to me the name of a New York professor who only remained in Edinburgh a single day, imagined that he comprehended the whole subject, but when he returned home and began its practice, he failed to obtain satisfactory results, and raised the cry of humbug; when Mr. Lister says positively that he knows from the character of some of his criticisms that he never understood the subject sufficiently well to practice it intelligently.

To illustrate the extreme care that is necessary in the practice of antiseptic surgery, he related to me the following case. He was opening under the spray a psoas abscess, the result of disease of the spine. His assistant who was working the spray apparatus, becoming annoyed at a student behind him, and kicking at him, allowed the jet of spray for just an instant to be so directed as not to cover the opening he had just made. In great anger the doctor told his assistant that if that patient died he might consider himself the cause of her death.

She did die, and Mr. Lister believes that the misdirection of that jet of spray for the small fraction of a minute was the cause of her death.

It is in this last mentioned disease that Mr. Lister claims the most eminent success for his treatment.

That it is the contamination of the diseased parts by septic germs that gain access to the diseased surface after the ordinary modes of opening the abscess, or allowing them to discharge themselves, is proven by the increased gravity of the symptoms that almost uniformly follow such discharge.

He opens these abscesses antiseptically as soon as possible, cutting down deeply, if necessary, puts on his antiseptic dressings, always changing them under the spray; and keeps his patient quietly in bed until the parts heal, which he claims they very uniformily do. He puts in a Chassaignac's drainage tube, which he allows to remain during the whole treatment, cutting it shorter as the parts heal from the bottom.

To show some of the results of antiseptic surgery as done by Mr. Lister, I have taken the following notes from cases in the wards of the infirmary, which cases I visited every day, and recorded the temperature myself.

John A., aged 23, amputation of the femur at the union of the lower and middle third for malignant disease of the knee joint. Highest temperature, $99\frac{4}{10}°$ Far.; never but little acceleration of pulse.

William G., aged 14; excision of knee joint for anchylosis, accompanied by extreme flexion. This case was a very difficult one, indeed, requiring tenotomy, and the removal of a large section of the femur. Highest temperature, $100\frac{3}{10}°$ Far.

Next case was that of William G., aged 34. Amputation at the hip joint for a chondroma of the upper portion of the femur. Highest temperature, $99\frac{4}{10}°$ Far.

The patient was perfectly comfortable after twenty-four hours, and went on to convalescence without an untoward symptom.

Mr. Lister insists that all surgical operations, except in rare cases, should be performed in the most slow and deliberate manner. He says that Mr. Liston introduced the dashing mode of operating into this country, much to the detriment, as he thinks, of the patients he operated on. In the case detailed above of excision of the knee joint, he was one hour and a half in performing the operation.

W. S. CALDWELL, M. D., of Warren, Ill.

Edinburgh, July, 1877.

Reviews and Book Notices.

GUY'S HOSPITAL REPORTS; Third Series, Vol. XXII. Published by *J. & A. Churchill*, New Burlington St., London, 1877.

The first article in this Report is by the veteran Edward Cock, on the laws governing the induration of primary syphilitic sores. From extensive personal observation, he asserts that the greatest induration occurs when the sores are situated on regions possessing the greatest amout of loose areolar tissue. Hence upon the prepuce induration proceeds to the greatest extent; on the body of the penis it is much less, and on the surface of the glans least of all.

From comparison of a vast number of recorded cases of syphilis, Mr. Cock concludes that the location of the chancre has a very important influence on the obstinacy and severity of the secondary symptoms, and in the following order:

1. Chancres on the outer edge of the prepuce have very slight secondary symptoms, but produce somewhat severer ones if they are near its base.

2. Sores on the body of the penis are followed by more severe secondary consequences, and still more so as the sore is nearer the pubis.

3. Chancres on the glans produce more secondary symptoms than those on the prepuce, or on the body of the penis, and, if situated in the groove behind the corona, the secondary results are the worst of all.

4. These inductions seem to imply that secondary syphilis is severe in proportion to the closeness of the anatomical relations of the chancre with the general system.

If these points shall be established they will prove germ thoughts, from which will spring a harvest of practical deductions.

The second article is by Samuel Wilks, M. D., on cerebritis, hysteria, and bulbar paralysis.

Dr. George H. Savage follows in an essay on "Some Relations of mental disease to Inheritance."

Dr. Pye-Smith gives us thirty-six pages on "Zanthelasma," and Mr. C. Higgens eighteen pages on "Preventable Blindness."

After these comes an elaborate article on the classification and distribution of diseases, and one on skin diseases, illustrated with plates. Dr. Goodhart gives an article of over eighty pages on the treatment, etc., of empyema. He tabulates seventy-seven cases. The favorite treatment was subaqueous drainage, by means of a drainage tube opening in a vessel of water. Thirty-one of the cases were treated in this way, with thirteen deaths, or about forty per cent. mortality. It appears that the Chicago plan of drainage and daily antiseptic injections, which has been applied here in about ten cases without a single failure, has scarcely occurred to the surgeons of Guy's Hospital, and they still persist in a method which terminates in the death of nearly half of the patients. They report only one case treated by injections, and say nothing as to what the injected materials were. Dr. Andrews, of Chicago, commenced the antiseptic pleural injections and published his cases four or five years ago. Dr. Fox, of Riverside, Ill., and Drs. Davis and Vittum, of Barraboo, Wis., have practiced it, and later it has been adopted in most of the American cities. It is scarcely creditable, for the surgeons of the greatest city in the world, to omit the use of a method which is everywhere else so much more successful than their own plan.

The remainder of the volume contains articles on Bright's, Addison's and Hodgkin's diseases, on osteotomy of the neck of the femur; on disease of the cæcum, on punctured fracture of the skull, on myeloid and several other diseases of the bones; on diphtheria and croup; on the use of sedatives, on the nervous system in diabetes; on poisoning by phosphorus; and on the treatment of varicose veins by excision.

The volume closes with a number of short communications, and with a statistical analysis of the patients treated during

the year. The total number treated in the wards was about 5,700, and the out-patients prescribed for were about 14,000.

The work is illustrated with quite a number of lithographs, and is a valuable contribution to the professional literature.

A COURSE OF PRACTICAL HISTOLOGY: BEING AN INTRODUCTION TO THE USE OF THE MICROSCOPE. By *Edward Albert Schaefer*, Assistant Professor of Physiology in University College, London. With illustrations on wood. Philadelphia: *Henry C. Lea*, 1877.

The author says in his preface that "THE PURPOSE of this work is to afford to those engaged in the practical study of Histology, plain and intelligible directions for the suitable preparation of the animal tissues; with the object, either of immediate study, or of their preservation as specimens for future reference." A sensible aim, surely.

The book begins with an introduction, describing, briefly but clearly, the various forms of microscopes of use to those engaged in Histological work. He omits all discussion of the optical principles involved in the construction of the instrument, and goes at once to a description of its parts and their uses. He makes no invidious distinctions, and mentions no names of makers, but the instrument which he figures is of the continental pattern, probably the small stand of Hartnack. He also figures and describes some of the more useful instruments in the preparing and mounting of objects, as forceps, and scissors of various forms, needles set in handles, etc. The introduction ends with a few brief, general directions for work.

In Chapter I. he begins with a study of the blood, giving directions for the examination of a drop of blood as it is drawn from the finger, and describing the different structures to be seen, and how to observe them. He then passes to the consideration of the action of different re-agents upon blood, beginning with heat, and illustrates, among other and older ones, a new and very ingenious apparatus for keeping blood or any other substance, at an even high temperature under the microscope for an indefinite time. He then passes on to the action of water, acetic acid, tannic acid, alkalies and chloroform upon the blood.

In submitting the blood to the action of the latter substance, he uses the moist chamber of Stricker; this chamber is made of a ring of putty put upon the slide. In using the chamber, a drop of chloroform is placed within the ring, and a thin glass with a drop of blood adhering to its under side, is placed over the ring, so that the drop of blood and of chloroform are within the same chamber. He also describes a plan for submitting blood to the vapor of chloroform, or other substances; he attaches a bit of glass tubing to the slide with a little sealing-wax, the end of which extends within the moist chamber; to the outer end of this glass tube a rubber tube is connected, which leads from the source of the supply of the vapor.

Leaving the consideration of human blood, he passes to the examination of frog's blood, and the "feeding of the white corpuscles" by rubbing up Indian ink with salt solution and mixing it with blood. The action of boracic acid and of carbonic acid gas upon frog's blood are next described, and a very ingenious apparatus for investigating the action of electricity upon the blood. The chapter closes with some account of the chemical constitution of the corpuscles.

This chapter is one of the most complete and satisfactory of any with which we are acquainted upon the subject.

Chapter II. goes in the same thorough manner into the study of epithelium. First, he considers the scales of epithelium found in saliva, the deep layers of the epithelium of the mouth, the horny layer of the epidermis, the columnar epithelium of the intestinal canal. He next passes on to the study of ciliated epithelium, recommending for this purpose the gills of the sea water mussel, and gives a number of interesting observations as to the action of various re-agents upon the motions of the cilia, such as heat, weak alkalies, carbonic acid and chloroform; he then considers the form and structure of the cells and the manner of preserving them, as permanent objects.

These chapters may serve as samples of the book; we will merely indicate the contents of the remaining chapters.

Chapter III. is taken up with a consideration of connective tissues, chapter IV. with cartilage, chapter V. with bone, chapter VI. with muscular tissue, chapter VII. with nervous tissue, including the nervous endings.

In this connection we would like to have seen a reference to the method of preparation so long used and defended by Dr. Beale. His methods certainly deserve more consideration than they have received in certain quarters. Many of his conclusions have been corroborated by other observers—indeed nearly all of his easier observations have been so confirmed, and the results of investigations are approaching nearer and nearer to his conclusions, and we are sure that they will in the main, be all confirmed in time. Dr. Beale's peculiar method of preparation is difficult, requiring skill and patient attention to many details, as well as the use of the very highest powers of the microscope. This may, perhaps, explain in some degree, the want of success of other observers, in reaching his results, and the neglect with which his views have been often treated.

Chapter VIII. describes the method of studying blood vessels; cutting sections of tissues; the examination of the circulation of the blood in the web, and mesentery of the frog, in the mesentery of small mammals, and in the lung and tongue of the toad. He then enters upon the consideration of methods of injecting, and the apparatus to be used. Chapter IX. is concerned with the lymphatics and serous membranes; chapter X. with the skin, hair and nails; chapter XI. takes up the heart; chapter XII. the lungs; chapter XIII. the mouth and pharynx; chapter XIV. the esophagus and the stomach; chapter XV. the small and large intestines; chapter XVI. the liver; chapter XVII. the spleen and urinary organs; chapter XVIII. the generative organs; chapter XIX. the central nervous system, the brain and spinal cord; chapter XX. the eye; chapter XXI. the ear and organs of taste. In conclusion there is an appendix with directions for measuring objects under the microscope, drawing objects, counting blood corpuscles, etc.

As a whole, the book is an admirable one. The descriptions are brief, but they are clear and detailed. The author has learned that rare art of stopping when he has said his say. The book has also the still more uncommon merit of bearing everywhere the impress of the author's own thought.

There is no such thing in the book as a condensation of a chapter, or section, or paragraph, from any one else. Even when describing some of the commonest processes, he shows such a practical familiarity with the details as to give his description the flavor of originality.

There is no useless lumber about the book; antiquated chapters, obsolete cuts, and pet theories are relentlessly pruned away, to the great saving of the reader's time and patience, and the great improvement of the whole work.

The illustrations are few in number, only about forty, besides the one which faces the title page, but they always serve a useful purpose. None are introduced for the sake of looking pretty.

In conclusion, we can confidently recommend the work as the most useful manual for the practical histologist with which we are acquainted. L. C.

How to Use the Ophthalmoscope. Being elementary instructions in Ophthalmoscopy. Arranged for Students. By *Edgar A. Browne.* Philadelphia: *Henry C. Lea.* 1877.

About twenty-five years ago, the ophthalmoscope was presented to the medical profession; it has, during its short career, accomplished wonderful things—results equalled by but few, and surpassed by no other instruments in a physician's hands. And yet, instead of being a pocket companion of most physicians, the ophthalmoscope is rarely found outside of the office of an oculist!

Why is it that this valuable little instrument is so unpopular with the average practitioner? In the first place, they think everything relating to the eye does not concern the ordinary physician, and consequently, do not care to know anything about it. And then, they have the idea that there is a certain mysterious difficulty in the use of the ophthalmoscope, that ordinary mortals cannot master.

Now, we contend that the average student of medicine is capable of learning the art of ophthalmoscopy, if he begins at the beginning and proceeds slowly and systematically. As the

child has to learn the A, B, and C before it can read, so the student must acquaint himself with the elementary facts in ophthalmoscopy, before he can use the instrument for any particular diagnostic purpose. He must know the fundamental laws of optics; he must learn how to look into the eye, and what to see in the normal eye. If these elements of the physical diagnosis of the eye are presented in plain and intelligent language, even the rawest student will be enabled to comprehend them. But the fault of many teachers is their desire to teach very much in the shortest possible time; they hurry, within the same lecture, from physical diagnosis to the symptomatology of diseases; from the appearance of a healthy eye to morbid anatomy. The student thus is suddenly bewildered by a multitude of new facts. This feeling will not overcome one who has read Browne's little book of 120 small octavo pages. It is very elementary; it is the very A, B, C of ophthalmoscopy, and for this reason we would recommend it to medical students. Indeed, we wish it might make many friends, because we expect it will do much toward popularizing the use of the ophthalmoscope.

The book, however, has a few deficiencies which should not pass unnoticed.

On page 58, Figs. 24 and 25 are designed to show the effect of inversion of the ophthalmoscopic image. The explanatory note to Fig. 24 reads as follows: "Fig. 24 is a map of the left eye in the erect image, showing the position of a disk, with the largest vein curving upward, and a diseased patch in the upper and inner quadrant of the field." But this diseased patch is situated in the sketch to the *right* side of the disk which always corresponds to the *outer* half of the *left* retina, and consequently the above explanation should read: "*a diseased patch in the upper and outer quadrant.*"

Speaking of the examination of the erect image the author says (p. 59): "Ascertain, in the first place, that your own refraction is normal; if not, a suitable correcting lens must be placed in the clip behind the mirror." He should have added right there, that it is equally important to ascertain the refraction of the examined eye and to correct any refractive anomaly,

especially myopia, by a suitable glass. With such directions as given on pages 54 to 61, a student will never succeed in seeing the erect image of the fundus of a near-sighted eye.

A serious blunder, we think, is committed by leaving out the parallactic displacement, among the signs by which we are able to ascertain alterations in the surface-level in the fundus. It is of far greater diagnostic value than any of the signs Browne has mentioned.

We notice a single typographical error: "Stannings papille" instead of "Stauungspapille."

COMPENDIUM OF HISTOLOGY. Twenty-four lectures by *Heinrich Frey*, Professor. Translated from the German by permission of the author, by *George R. Cutter*, M. D., Assistant Surgeon New York Eye and Ear Infirmary; Ophthalmic and Aural Surgeon, New York Dispensary, etc., etc. Illustrated by 208 engravings on wood. New York: *G. P. Putnam's Sons.* 1876.

This book is a weariness to the flesh; a plague to the conscientious reviewer. It is a book one takes up with expectation and delight, reads with a sense of disappointment, and throws aside with a feeling of profound relief at having completed an irksome task. Its style is stilted, bombastic, sophomoric. Take for example the first sentence of the First Lecture: "A deep abyss separates the inorganic from the organic, the inanimate from the animate. The rock-crystal on the one side—vegetable and animal on the other; how infinitely different the image." We almost experience a feeling of relief when we find that no convulsion of nature follows the promulgation of this ponderous proposition; but our apprehensions are again aroused when we read that "it is reserved for future generations of men to fill up this yawning chasm by the aid of a more thorough knowledge of nature, and to comprehend the sphere of the material world as a unit."

Next is propounded the conundrum, "What is the primary beginning of the organic?" To this query the following answer is made:

"An admirable English naturalist, Huxley, succeeded, in the year 1868, in making a marvelous discovery. The bottom

of our seas, at the most considerable depths, is covered over, in large tracts, with a strange, slimy substance. When this thing, called the bathybius, is drawn up by the dredge and placed under the microscope—under that instrument which has conquered the mighty world of minuteness for natural science—a very peculiar image is presented to the astonished eye," etc., etc. This constitutes the first page. We shall inflict no further excerpts upon the "astonished eye" of the reader, but simply summarize our impressions of the book.

The style lacks simplicity, clearness, terseness—hence force; it is rich in ambiguity, elephantine vivacity and commencement-day rhetoric; complications of negatives and abrupt transitions abound; originality in the use of language is strikingly apparent. Talleyrand is credited with the remark that the art of conversation consists in concealing one's thoughts; our author would evidently not restrict the art to conversation.

Yet concealed beneath the grotesque manner is much valuable matter. The book is apparently a condensation of Frey's "Histology and Histo-Chemistry,"—which, though imperfect, is probably the best text-book on the subject in the language. The larger book is generally free from the follies of the smaller —thanks, probably, to the translator. The general plan of the "Compendium" is excellent, the admirable classification and arrangement of the larger work being substantially retained in the smaller. The first lecture is a brief discussion of the origin, structure and function of the cell; the second is devoted to classification of the tissues, based upon the variation of the component cells from their primitive type, and upon the nature of the intercellular substance. This classification the author clumsily, but truthfully, pronounces "preponderating artificial, which, with all its defectiveness, possesses, at least, the advantage of presenting the material in a more convenient form to the learner." Seven succeeding lectures are consumed in describing the individual tissues; the remainder of the work discusses the combination of those tissues in the formation of organs. It is to be regretted that but little attention is given to embryology; surely the structure of mature tissues and organs would be far more intelligible to the student, after a study of their origin and development.

The exposition in the compendium is, in general, sufficiently minute for the student, and yet so brief as to secure attention where the elaborate descriptions of Stricker and Frey would overwhelm.

For the fidelity of the work the author's name is sufficient guaranty; that he differs from other histologists on certain points is due to the fact that he has a foundation for opinions of his own.

The wood-engravings are more than ordinarily well executed. A singular omission, especially unfortunate to the student of theoretical history only, is the neglect to state the amplification represented in the cuts.

On the whole we do not regard the compendium as essential to the student's library. W. L. B.

THE ELECTRIC BATH—ITS MEDICAL USES, EFFECTS AND APPLIANCES. By *George M. Schweig, M.D.* 134 pages. New York: *G. P. Putnam's Sons.* 1877.

With the exception of a few meager remarks on the "electro-chemical bath," in one or two works on electricity, and a few fugitive articles in some of the recent journals, there has been but little recorded of the electrical bath as a remedial agent. Should we consult the patent office reports, and some of the proceedings of courts of justice, we would find that the electric bath is no new thing. This is but another illustration of the fact, that many of our best remedies, and now recognized means for the treatment of disease, have originated outside of the medical profession, and have only been adopted after their utility has been proven by the laity, and some physician has first used and given them to the profession.

This work from a scientific source, the first-born, though by no means the first conceived of the kind, we welcome, as an effective means of taking from the laity and charlatans a valuable, and frequently (in their hands) a dangerous means of treating disease.

The publishers have performed their work well, and have given us an attractive book.

The apparatus used and described by Dr. Schweig is crude,

and admits of but few of the finer modes of application of the more complete apparatus. His tub, from the description, is but little more than a square box, for he says, "It is very difficult to make a wooden tub with a slanting back, water-tight." This is entirely different from our experience in the construction of tubs. He also says, "It must not be forgotten, however, that a wooden tub requires to be well painted inside, in order to prevent its becoming water-soaked, because in that event it would become a conductor of electricity, and interfere, to some extent, with the administration of the electric current." Here we again differ. Should the unpainted tub become water-soaked, it is not enough better conductor than water to make any perceptible difference in the passage of the current from one electrode to another through the water. Even if the tub is painted, it is liable to become water-soaked. We speak from experience, for we have used both the painted and unpainted tubs, and have found no difference. The electrodes, two in number, are fastened one at the head and the other at the foot of the tub, by means of a piece of cloth stretched over the electrode and tacked to the tub. This is certainly a most uncleanly means, for after a few days immersion in water, the cloth will become slimy and decidedly nasty, besides affording a splendid receptacle for that which the patient may leave behind him. The "surface board" (p. 14) could with advantage be dispensed with, and any of the ordinary forms of electrodes for the general local application of electricity be substituted with advantage.

He recognizes the great advantage derived from medicating the bath with various chemicals, the benefits of which can hardly be appreciated save by those who have had experience in this mode of administering remedies.

We regret that he does not enter more into the detail of treating the various cases he records. What he has said of the treatment will be of service to those who have no knowledge of the bath; yet we have the feeling as we finish the book, that because he knows all about the administration of the bath, his readers must also know all that he does, and thus supply that which is not written.

On page 97 occurs, "but will carefully discriminate, and conscientiously exclude those cases in which general electrization might result injuriously. In such cases a tolerably accurate diagnosis is, as a rule, readily made, and will enable the physician to separate the suitable from the unsuitable cases." That this is the fact we do not question, but we certainly would like some details of the cases in which injury may result, rather than the bare statement that such is the case.

We are glad this book has been added to medical literature, as it is, perhaps, the first of a series which will supply the needs of the profession.

Translations.

GYNÆCOLOGY IN JAPAN.

By Dr. A. Wernich, of Yeddo.

[TRANSLATED BY DR. JAMES I. TUCKER, CHICAGO.]

(Continued.)

GYNÆCOLOGICAL DISEASES. I. OVARIES.

In examining the materials of ovarian disease, which my colleague, Dr. Schultze, has collected, and which he kindly permitted me to use, I find no account whatever of Oöphoritis. This is not to be attributed altogether to the caution which is universally observed in the diagnosis of these extreme puerperal conditions, but to the fact that of all the cases not even one has awakened the suspicion that this condition existed.

Encysted and indurated tumors were, on the contrary, met with in 21 well-marked and rather advanced cases. These cases were shared by Dr. Schultze and myself. He had nine and I had twelve, since those patients who came to the hospital for the purpose of operations were immediately assigned to the surgical department. Among my twelve cases were four clearly cystic, fluctuating tumors, one of which proved upon puncture to be a multilocular cystoid. Eight of my cases were surrounded with solid matter, among which were two very hard, apparently perfectly solid tumors. I am of the

opinion that we must look upon this preponderance of the latter as accidental, especially as Dr. Schultze out of nine cases found three (including those recorded somewhat in detail below), as solid tumors (cysto-sarcoma or teratoid).

I omit here intentionally the anatomical description of the preparations derived from ovariotomy, because Dr. Schultze has reserved for himself the report of operations, and the description of tumors must necessarily form an important part of this report.

I give instead, the result of clinical observation, as follows;

The growth of tumors, of the encysted as well as the indurated character, was, on the whole, slow. Though the Japanese women are attentive to *Katameri* (literally translated; lumpy masses), in the abdomen, yet only one could give an account of a tumor whose growth was really rapid. Three or four years was the interval after the discovery of the usual tumor, as large as the fist, to the time when it had become troublesome through size and weight. After Dr. Shultze had operated on three cases of ovarian tumor, in quick succession, a number of new cases made their appearance. Yet in private practice I met with a number of ovarian tumors which could only be felt, but which had existed five to six years.

Relief by spontaneous evacuation from the outside, or through the peritoneum, is apparently not at all known. Puncture is regarded necessary by physicians and the women, and has been a means of palliation for a long time. Prior to the first ovariotomy in Japan by Dr. Schultze, with my assistance, March 25, 1875, ovarian tumor was supposed to be a fatal disease.

I have never observed any remarkable alteration in, or sudden disappearance of these tumors. Inflammation in and about the tumor was noticed in one case.

Functional disturbances of other organs were, it is true, distinctly observed, but not felt, in excessive degree. In my twelve cases ascites was proven to exist in six, by physical examination, and in three by puncture and examination of the fluid contents. Albuminuria, cachexia, and marked disturb-

ances of the stomach and alimentary canal were rare, on the contrary there was always considerable dyspnœa.

According to age the cases stand as follows :

At 11 years of age,	1 case.
From 20–30 years of age,	4 cases.
" 30–40 " " "	9 "
" 40–50 " " "	5 "
" 50–60 " " "	2 "
At 62 years of age,	1 case.

It was impossible to discover any single aetiological influence, neither heredity, early or late appearance of menstruation, earlier or later marriage, frequent confinments, nor complication with other gynæcological diseases.

In my twelve cases, there was sudden suppression of menstruation in two; the period was irregular in nine; it continued perfectly regular in one.

Pains in the abdomen, generally referred to one side, was the first symptom in ten cases. Suppression of the urine or dysuria was observed only in two cases. Severe constipation occurred six times. Only once was the tumor unexpectedly discovered.

Neither Dr. Schultze nor I can contribute anything to lessen the difficulties in diagnosis, as the cases, as a whole, had been for a long time developed, and their true character easily distinguishable. Once, in a very respectable old Japanese woman, who, at my first visit, objected to an inward examination, I was uncertain whether I had to deal with ascites alone, or cysts complicated with ascites. The trocar enabled me to decide that the latter opinion was correct.

The following case, which Dr. Schultze kindly gave me for this communication, deserves especial mention.

IWATA. *Child* 11 *years old.*

Previously well. In January, 1875, she noticed, herself, in the left side of the abdomen a swelling about the size of a hen's egg, movable and destitute of sensation. Despite the remedies used, the swelling increased more and more. Since May, 1875, the patient has been obliged to go to stool several times a day. The discharge was not diarrhœtic, but somewhat softer than

usual. After each passage, she experienced some pain in the region of the stomach; the emptying of the bladder, also, must be attended to oftener than formerly. For 20 days, feeling of weight and numbness in right foot, with some ataxy.

Status praesens from November 24, 1875. A maiden of healthy appearance, developed in proportion to her age. Subcutaneous connective tissue moderately adipose, mucous membrane somewhat pale. The belly is remarkable, being swelled up in a very irregular manner. There are especially two bunches, one in the regio mesogastrica dextra, the other in the regio hypogastrica media. The circumference of the abdomen, on a level with the umbilicus, is 58 Cm., on a level with the spinæ ant. sup., 62.5 Cm. Upon palpation, we feel a tumor in the abdominal cavity, filling the lower part of the cavity completely, and extending to the right as far as the lower lobe of the liver. From the lower part of the abdomen there extended a cord-like prolongation into the pelvis. The swelling had a knotty hardness, soft and elastic in the prolongation mentioned. The percussion impulse is absolutely dull over the tumor. The tumor is movable, and seems to be attached in the pelvis only. No tumor is discoverable upon rectal examination.

Exploration per vaginam was unavailable, on account of the natural obstacles presented by the genital organs of a child.

All the other organs were sound; the general condition, with the exception of difficulty of defecation and urination, intact. The patient was examined in the poli-clinic; she came several weeks, without change.

Diagnosis: Tumor ovarii dextri-teratoides (?)

II. UTERUS.

A. INFLAMMATORY AFFECTIONS.

I have never realized before so fully and unequivocally the quick and strong participation of the genital system in the affections of the whole female organism. While the habits which the Japanese women observe at the time of their menstruation, their slowness and cautiousness of bodily movements, the remarkably quiet temperament of the women and girls, which has already been referred to as peculiar to them,

protect them almost absolutely from many very common causes and frequent occurrences of various uterine diseases, nevertheless scanty and interrupted mensturation occurs almost instantly as the consequence of severe internal disorder. I have endeavored to avoid confounding here cause and effect mistaking the deleterious consequences of an endometritis or chronic infarction with the vaguely distinguishable forms of disease which proceed from other internal organs. When I consult my notes and observe how seldom *trauma*, colds, and puerperal disorders figure among the forerunners of uterine affections, and how often, on the other hand, dysentery, a typhus, a yearly-recurring bronchial catarrh, and one or several attacks of hæmoptysis were clearly related to the existing trouble, thereby I am involuntarily impressed with the thought, by no means new but not entertained by all gynæcologists, that we should not only form a correct judgement concerning the local genital condition, but examine every gynæcological case in all its mainfold relations. It is to be hoped that the remark of a colleague, now dead, may not be general, a remark which he made with a sort of grim pleasure, to the effect that "he did not recognize women as old patients till he had them on the examination chair, and saw them *from below*."

Those conditions which bore most frequently ætiological relations to *chronic hypertrophy of the cervix*, (pardon me for classifying this under "inflammatory affections") were the gradually developing chronic diseases of the lungs, especially infiltration with progressive tuberculization occurring after hæmoptoë, and cardiac dilitation, according to Beriberi. Next should be mentioned as by no means uncommon typhus, chronic gastric catarrh during the hot months and simple bronchial catarrh. It is not necessary to say that subinvolution in puerperium did not fail to appear, and also anæmia and hydræmia congenital, or acquired in childhood.

The form was generally that of a very widely expanded, swollen (ectropioned) vulva, some elongation of the whole organ, and prominent, dilated and over-filled blood-vessels. Erosions were observed in more than half the cases, deep

lesions of the mucous membrane never. Good results followed the therapeutic means employed, which consisted of occasional heroic section of the dilated vessels, glycerine tampons, reclined position in bed, and mild astringent injections of gradually diminished temperature. Erosions healed much more promptly under the use of solutions of carbolate of zinc, or of carbolized oil, than of argentum nitricum, or under the use of some of the stronger astringents.

One constitutional peculiarity of the Japanese women worked admirably against the danger from all acute inflammatory conditions of the uterus, namely, a very sluggish reaction of the whole mucous membrane. Puerperal endometritiden of considerable intensity, and apparently of a character not devoid of danger, got well quickly and surely under moderate mercurialization, and regular syringing with carbolic and salicylic acids.

B. MORBID GROWTHS.

If only one carcinoma uteri came to hand among the only 13 gynæcological patients, who, as out-patients, were immediately transferred to the surgical department, it should not be looked upon as anything particularly unusual. If, however, among the other 74 cases consigned to me and called "gynæcological," not a single carcinoma of the cervix appeared, the remark will appear justifiable that in Japan, at least in these parts of the country (from which the reputation of European physicians is continually drawing patients to the capital), carcinoma of the uterus is a very rare disease. In confirmation of this, my assistants were quite astonished, upon hearing me describe uterine cancer as a frequent cause of death, and several of them otherwise well-educated men, knew nothing of the disease in question even from hearsay. In respect to the ætiological significance of cancer, to which in many new and good works on the subject of gynæcology more and more space is being given, I cannot avoid referring once more to my general characteristics of the Japanese women. If, indeed, it is true that the influence of continual emotional excitement is to be regarded as a cause, we can almost understand how

the women of a nation who live on so quietly, cheerfully, and without powerful emotion, as is the case with the Japanese women, how such women, I say, may be afflicted with cancer with remarkable infrequency. The inquiring pathologist who assigns reverses of fortune, etc., as the cause of so and so much per cent. of uterine cancer, only needs to take a short step into the domain of morals, to meet the most terrible admonition, and how near to my observation (surely not altogether accidental) that carcinoma of the uterus is very rare, is the conclusion that: *uterine cancer in the overwhelming majority of cases, is a consequence of the social and conjugal misery of our great cities!*

The above-mentioned single case, which occurred in a woman 46 years old, had already *verjauchung* (foul discharge), and perforation of the vagina, and the patient was much emaciated. She died after a two-weeks' sojourn in the surgical department.

Sarcoma of the fundus uteri I have witnessed in one patient, whom I was called to see in consultation with a Japanese physician, a few days before her death. There were large pieces which were microscopically distinguished as sarcoma, and in the fundus soft, friable irregular masses of the tumor, a part of which could easily be reached and removed by the finger. Yet the strength of the patient had so far failed, that for the removal of the fundus it would have required a certain improvement in the general condition, which was now impossible.

As a very common affection here I must speak of fibroma and fibro-myoma of the uterus. There were nine cases, of which four occurred in private practice, and five in the clinic. Of the latter, two left when the troublesome pains were relieved and the profuse bleeding had stopped, which was promptly after the use of ergotin injections. They left because these were painful to them. One left in eight and the other in eleven days. The other three cases deserve a short special mention.

Case I. (Dr. Schultze). Ito, 28 years old. Since September, 1875, pains in abdomen and irregular hemorrhages. In January, 1876, the bleeding persisted, though in moderate degree, twenty-five days. She had never been pregnant.

February 28th, 1876, the portio vaginalis completely anteverted. In the posterior concavity of the vagina an irregular, knotty, hard tumor. This can be distinctly felt from the rectum. It almost completely fills the rectum in the upper part, and extends so far upward, that its superior surface cannot be reached. The tumor is plainly attached to the posterior wall of the uterus. It cannot be felt distinctly in the abdomen. Uterine sound can be introduced but three cm., speculum examination reveals nothing of importance.

Case II. (My own observation.) Nurse, 48 years old. She complains of sense of weight and afterward bearing down sensations in the abdomen which have lasted two years. In September, 1875, felt, while at stool, a hard, labor-like pressure, and discovered, upon feeling in the vagina, a smooth, firm and soft bleeding body. It was two months before, on account of repeated hemorrhages which reduced her strength to a great degree, she concluded to take to her bed in the medical ward, and the following was discovered upon examination.

Just behind the lesser lips there was found a tumor of the size of a man's fist, of somewhat unequal, firm, and elastic consistency, closely encompassed every where by the vaginal walls. The mucous membrane of the vagina was smooth and very vascular. It was only possible to feel a fleshy protuberance (the anterior lips of the os uteri) after laboriously pressing up two fingers. In front the tumor obstructed the admission of the fingers, yet the character of the swelling is made out with sufficient clearness by sound and rectal examination, as one proceeding out of the uterus. The patient suffered considerably from hemorrhage and pain, and was very much reduced. We would under these circumstances have decided to remove the fibromyomal growth, had we been able to reach a pedicle. Twice daily injections of ergotin, to which this patient willingly submitted. The pains ceased first, then long cessation of the bleeding, which up to that time was almost continual. Gradually, as a consequence of the perpetual contraction of the uterus induced by the ergotin, a distinct pedicle began to form, up as far as (now after two and a half

months) we are able to feel even to the peripherally-perfect circumference through the mouth of the womb. Yet the patient at this time felt so well as the result of internal and external use of liq. ferri sesquichloridi (she had not lost a drop of blood for fifty days), that an operation did not seem to be indicated. The tumor has become much firmer and somewhat reduced in size.*

Case III. (My own observation.) Madzusan, 34 years of age.

On the 24th of August, 1875, there was presented to me under the false diagnosis of "procidentia uteri" a patient with fibroid almost as big as as a child's head. The tumor, which for 13 days had protruded from the uterus and the vulva, was almost ulcerated off on its entire upper surface, and was covered with grayish brown, masses. It was attached to the somewhat inverted anterior uterine wall, by a thick pedicle of the thickness of two thumbs, and emitted a pestiferous stench. The patient could scarcely be said to be alive, she had lost so much blood. Over the symphysis and per rectum we felt a hard mass, apparently attached to the uterine wall, but it afterwards proved to be a flat intramural fibroid of the posterior wall. I concluded, under necessary precautions, to take off the projecting portion of the tumor by means of the galvano-cautery. The examination of the tumor revealed a simple fibrous structure; the ulceration of the upper surface was entirely conditioned by the frequent change of position of the patient, lying now upon her back and again sitting up, on account of the discomfort occasioned by the heavy hanging tumor, and conditioned also by the injurious effects of excessive heat.

The patient was perfectly well in three days. The cut end of the pedicle, which withdrew more and more into the uterine cavity, was entirely healed in eight days. The efforts to still further reduce the size of the part of the fibrous growth which was situated in the walls of the uterus, was only partially successful.

* The operation was, however, performed in the middle of June by means of the Ecraseur.

C. Alterations in form and position.

Twenty-three cases came under my observation, wherein there were changes in the position of the uterus from different causes; three of them were treated by pessaries, and eleven with other uterine supports. In some resorbents upon tampons, or in the form of suppositories were used; in others the patients were caused to lie constantly on the belly, and treatment of circumscribed parts of the vagina resorted to.

Hæmatometra has come only once to my notice. It exhibited a simple imperforatio hymenis and retention of the menstrual fluid, of twenty months standing. The case was cured by a simple crucial incision, and avoidance of pressure during the discharge.

Absence of the uterus, with a very short vagina (2½ cm.) was observed in one person twenty-one years old, who was otherwise very well developed. Upon synchronous palpation per rectum and vagina, we could feel above the cul-de-sac of the vagina a movable, smooth body, of the size of an almond.

Atrophy of the uterus seemed very frequently to appear very soon after the menopause. At least I have found it in all old women from 50 to 60 years of age, whom I examined in part for the sake ot being thorough, and of the students. We found a remarkably small, shrivelled and bloodless portio vaginalis hanging down in the vagina like a fold of skin, and upon examination with the sound, a uterine cavity of only 3 to 4 cm.

III. AFFECTIONS IN THE NEIGHBORHOOD OF THE UTERUS.

What I have already mentioned while speaking of puerperal endometritiden and metritiden concerning a favorable, often almost reactionless course, may be reiterated in regard to peri and parametritic processes, and is true of the majority of cases. At least the older ones, and the practitioners among my assistant physicians, have had no experience with the severer results of these inflammations. The presumption that in parametritic inflammations of a suppurative character, and leading to rupture, the mild course may be transformed into one enormously sluggish, was corroborated by the case of

a 27-year-old primipara, who, exactly 10 months after the inception of a fluctuating tumor, was relieved of the pus it contained. A few days after the confinement she felt pain in the left side, which was succeeded by a feeling of heavy pressure and the discovery of a swelling which gradually became softer and softer. The diagnosis was difficult, on account of the extraordinarily slow development of the fluctuation, the absence of reaction, and because the discharge was so long delayed. At last the exudation worked itself to the left side, and showed here, immediately over Poupart's ligament, with fever-symptoms, but without particular pain, a very soft fluctuating place of the size of a walnut, from which (after incision) there escaped not only in the left side the newly-accumulated, but on the right side the long pent-up matter. After the evacuation the patient recovered in a few days.

Hæmatocele seems to be very rare. To the native physicians it was wholly unknown. I myself saw it once in residuum after the resorption was quite far advanced. There is perhaps another way to explain it, viz., by the fact that the Japanese women are seldom on the street during the period of menstruation.

IV. DISEASES WHICH INVOLVE THE VAGINA AND THE EXTERNAL GENITAL ORGANS.

Excepting elephantiasis, these have been seen neither by Dr. Schultze nor myself. Women (and also men) with a particularly high grade of elephantiasis of the lower extremities and of the sexual organs, exhibited themselves sometimes in the booths in the neighborhood of the Temple as objects of charity. A case of condylomata lata and acuminata, which came under treatment in the surgical clinic was interesting to us on account of the monstrous collection of the characteristic eminences.

Connected with the notice of the remarkably prominent meatus of the urethra, I may mention three cases as pathological, in which the entire urethral protuberance had a sausage-like feel, with a very significant degree of prolapse of the vaginal parietes without anything more than a slight anteversion of

the uterus. The patients stated that it was gradually superincumbent upon an incontinent nocturnal urination. All three were unmarried and sterile. The suffering was relieved by leeches, large glycerin tampons, and cold tannin injections repeated every half hour. In close relation to the urethral abnormalities stands the frequent development of urethral carunculæ, a condition of things which has thrice come under my observation. The severe burning pains and occasional hemorrhages were always relieved by a simple operation. In one case it was necessary to treat the carunclæ of the urethra not only by dilatation, but subsequently by cauterization.

Vagino-blennorrhœa were very stubborn and unyielding when they were sequels of inflammation. Quantities of mucopurulent matter welled up in the morning in spite of efforts to keep clean, and in spite of the application of pulverized and dissolved astringent to the flabby, unevenly-swollen, and ecchymosed mucous membrane of the vagina. For this condition, diluted liq. ferri sesquichlor. alternated with strong solutions of carbolic acid, were used.

Selections.

TREATMENT OF DISEASES OF THE HAIR.

(From The Doctor, August, 1877.)

Professor Erasmus Wilson has devoted this year's course on Dermatology to the diseases of the hair system. Among these, baldness and greyness occupies an important position, and like others, were discussed in an exhaustive manner. The lectures that are appearing *in extenso* in the *Medical Examiner* will be perused by all dermatologists, and therefore we may safely confine ourselves to the therapeutics of baldness, alopecia, or calvities, and baldness. Poliothrix, or canities, as a prophylactic brushing is of the first importance, as it promotes circulation and renovation, as well as removes scurf. Though advocating cleanliness to the utmost, to the question, "Am I to wash my head?" Mr. Wilson replies emphatically "No."

Water is a less effective stimulant than brushing, even when sea-water is used. Cutting is less effective in promoting growth than is commonly believed, but is advantageously applied to the short, slender hairs commonly called "young hairs," and which are so often associated with baldness.

The number of applications warranted to cure baldness is legion, and their constant failure familiar to all. From the fat of the bear to the spirituous essence, most of them are stimulants, as is the petroleum lately vaunted. All occasionally seem to succeed—that is, the public observe that the hair grows after the use, and the public never experiences the fallacy of *post hoc ergo propter hoc* in matters therapeutic. Our readers will be glad to hear the experience of Professor Wilson on the use of some of these remedies, which we proceed to give, beginning with cantharides, acetic acid, and ammonia. He found croton oil, although excellent as to its stimulating effects, peculiarly unmanageable as an application for the head. In one instance, in a young lady, it produced so much redness and swelling, symptoms which extended to the eyelids and face, that he was threatened with a legal prosecution for prescribing it. In a few days the swelling subsided, and as the hair grew again satisfactorily, he was let off without action or thanks. The croton oil having played a similar prank on a second occasion, he has discarded it.

The milder and more manageable stimulation of cantharides has gained it a popular character, both as a stimulant and as an epispastic; but it also is not without its reverse. It is too apt to stretch its stimulative power to the extent of irritation, to give rise to inflammatory congestion and vesication, and sometimes to suppuration and ulceration. Every now and then it may come across a peculiarly sensitive skin, while at other times it may have been employed too energetically, both as to quantity and time. Mr. Wilson has seen several instances in which cantharadine has been absorbed into the system, and has given rise to ischuria. As a rule, therefore, he rarely uses cantharides, and then always in a guarded manner. Certainly it is not a remedy to be trusted to the acknowled indiscretion of the public as a popular remedy.

Acetic acid, or rather strong pyroligneous acid, he has discontinued for many years. But judging from the reports of those who have employed it, it is still a favorite, although its favor is somewhat alloyed by the convicting evidence of a strong and disagreeable odor.

Ammonia is Mr. Wilson's favorite; it may be limited easily to the bounds of stimulation; it is unlikely to create inflammation and its consequences; it is neither absorbable into the system, nor could it do harm if such were the case, and its odor, refreshing at the moment of its use, speedily evaporates. A formula for an ammonia lotion is to be found in Willan and Bateman's book; ammonia is the active principle of a lotion for the hair of considerable reputation, called Locock's lotion; and it is also the essential ingredient of a lotion which is sold through the length and breadth of the kingdom under his name, and probably taken from some of his works.

Now, in a case of ordinary madesia or defluvium capillorum, the popular falling out of the hair, he still prescribes a lotion composed of strong liquor ammoniæ, almond oil, and chloroform, of each one part, diluted with five parts of spirits of wine, or spirits of rosemary, and made pleasant as to fragrancy by the addition of a drachm of the essential oil of lemons. The instructions for the use of this lotion are, that it should be dabbed upon the skin of the head after thorough friction with the hair-brush. No doubt there are cases in which this lotion must be used with caution. It may be diluted if necessary; it may be applied sparingly or abundantly; and it may be used daily or otherwise.

There are cases in which a less stimulating and even a refrigerating lotion may be required, and where an objection may be raised to the quantity of oil contained in the former lotion, in which cases a lotion of borax and glycerine, two drachms of each to eight ounces of distilled water, is cooling and refreshing; this lotion allays dryness of the skin, removes scurf, and subdues irritability.

In cases of complete baldness, the phalachrosis of the Greeks, and also in alopecia areata, a stronger stimulant application will be required. In such a case he recommends fric-

tions with a liniment composed of equal parts of the liniments of camphor, ammonia, chloroform, and aconite, to be well rubbed into the bare places daily, or even twice a day, so as to produce a moderate amount of stimulation. In cases of ophiasis, due to neuralgia of the cutaneous nerves of the scalp, this liniment is very valuable. In other cases the liniment of iodine may be painted on the bare patches daily, or they may be stimulated by friction with the ointment of cantharides, or any other powerful stimulant. Painting the discs of area with the epispastic fluid of the Pharmacopœia may also occasionally be resorted to, or the epispastic fluid may be diluted with spirits of camphor. The intention of all these local remedies is to stimulate without setting up irritation; to increase the energy of circulation and innervation of the part, and in some instances to abstract the excess of fluids from the tissues of the skin by inducing exudation. But these results must be accomplished, as far as possible, without pain and without severity.

The constitutional treatment of alopecia should consist in the adjustment and regulation of the functions of digestion and assimilation, and where no other special conditions are to be fulfilled the adoption of a tonic regimen and the administration of tonic remedies. Of these last arsenic bears the palm, and may be advantageously prescribed in doses of two to four minims three times a day, directly after food, and in any convenient vehicle.

Alopecia syphilitica will yield very readily to the treatment applicable to the parent disease, namely, iodide of potassium, with the local inunction of the nitric oxide of mercury ointment diluted in the proportion of one part to three or four of benzoated lard or vaseline, or the use of a lotion of the perchloride of mercury.

With regard to greyness, canities, or poliothrix, it is to be observed that as it depends like baldness on defective powers of the skin, the indications for treatment are exactly the same —to strengthen the part and at the same time strengthen the patient. To fulfill these indications we may resort to the same prescriptions. When cure is not anticipated, and in other

cases, too, we may be asked to assist in concealing what is looked upon as a deformity.

Among temporary staining to hair he mentioned a weak solution of permanganate of potash, a lotion holding in suspension sulphur and acetate of lead, or the so-called *eau des Fées*, consisting of the hyposulphites of lead and soda; among dyes sulphides of various metals, especially silver, the pyrogallate of iron and ferro-cyanide of copper. The hair, as is well known, contains sulphur, and a solution of lead brought into contact with sulphur produces a sulphide of lead which is black in color. Sulphur and acetate of lead in suspension and solution in water supply both the elements necessary for artificial coloration of the hair, and constitute the popular lotions sold so largely.

Actual dying of the hair is a more elaborate process; the hair must be washed with soap in the first place, to get rid of grease, which would otherwise interfere with the absorption of the fluid by the hairy tissue; secondly, the hair being dried, the metallic solution is to be employed and left to soak into the hair; and thirdly, the mordant fluid is to be brushed upon the part with a view to bring it in contact with every individual hair. If this operation sufficed for a considerable period, all would be well; but as we know that the hair grows quickly, the newly-grown part exhibits its original whiteness, and other dyeing soon becomes necessary. The tone of color produced by the first application may have been perfect, leaving nothing to be desired, but the white roots of the hair cannot be reached without a fresh coloring being diffused over the whole, and then the evils become apparent; a succession of coats of color render the hair more intensely black than nature herself could have accomplished, and the harmony of the featurs of the individual is disturbed: the mellowing of the lineaments of the countenance produced by white hair is reversed by the depth of the blackness, and the features are rendered harsh and severe. The theory that an appearance of youth is maintained by the color of the hair is not consistent with fact, and there is always the danger that the hair

may appear youthful, while the features themselves are expressive of old age.

As to danger to the health and constitution from dyeing the hair, Professor Wilson thinks that we cannot reasonably allege the possibility of any serious evils, for lead, to which are imputed the most dangerous of the qualities of hair dyes, enters into the composition of several of our cooling and astrigent and sedative lotions, and even injections, and although undoubtedly some cases are on record of damage resulting from its internal and excessive use, Goulard's lotion is commonly received among us as one of the most harmless of our remedies. Perhaps a distinction may be drawn between its therapeutical and its cosmetical use, but it is difficult to distinuguish the difference. It is fair, however, to state that one of our journals reports that "there died in Iowa Dr. Witherwax, from the effects of a hair-dye containing lead. He had employed the dye to his head and whiskers for four years, and during that period experienced many reminders in the shape of lead colic. Two medical men detected lead in his liver and kidneys on analysis." No further search would appear to have been prosecuted elsewhere, namely, in the direction of his drinking water. Mr. Wilson remembers two instances in which complaint was made against a lead lotion used for the purpose of coloring the hair, although several have been mentioned to him from time to time; and both cases may possibly be considered as examples of idiosyncrasy.

Medical News and Items.

Dr. Lewis A. Sayre, of New York, is entertaining the medical public of Great Britain with his description of the plaster of Paris treatment of spinal curvature.

The Chicago Society of Physicians and Surgeons has formally accepted the invitation of the Librarian of the Medical Press Association, and will hereafter meet in the rooms of the latter organization, at No. 188 S. Clark st.

LICENTIATES OF THE STATE BOARD OF HEALTH.—We propose to publish, for the benefit of our readers, the names and dates of graduation, of the physicians in the State and City, licensed to practice medicine by the State Board of Health.

PROF. ALPHEUS BENNING CROSBY, M. D., died August 10th of apoplexy, at his country-seat, Hanover, N. H. He held the Professorship of Anatomy at Bellevue Hospital Medical College and of Surgery at Dartmouth. He had also lectured on surgery at Michigan University and Long Island Medical College. He was unusually gifted as a lecturer, and enjoyed a popularity not more because of his rare ability, than of his genial social qualities. All who knew him will be pained to learn of his untimely death.

INDIANA ILLINOIS AND KENTUCKY INTER-STATE MEDICAL SOCIETY.—This Society will hold its third session in the city of Evansville, Ind., commencing 11 A. M., Third Tuesday in October, 1877, and continue three days.

President, W. H. Byford, A. M. M. D., Chicago, Ill.

1st Vice President, C. L. Dismukes, M. D., Mayfield, Ky.

2d Vice President, G. G. Barton, M. D., Washington, Ind.

3d Vice President, F. W. Deming, M. D., Pana, Ill.

Recording Secretary, G. W. Barton, M. D., Mitchell, Ind.

Corresponding Sec'y., F. W. Beard, M. D., Vincennes, Ind.

Treasurer, A. Patton, M. D., Vincennes, Ind.

Section of Surgery and Anatomy, J. W. Thompson, M. D., Paducah, Ky., Chairman; J. H. Letcher, M.D., Henderson, Ky., Sec'y.; Section of Obsteterics and Gynecology; J. A. Ireland, M. D., Louisville, Ky., chairman; S. H. Carlton, M. D., Seymour, Ind., Secretary; Section of State Medicine and Hygiene, J. W. Compton, M. D., Chairman, Evansville, Ind.; Section on Practical Medicine; J. H. Hibberd, M. D., Richmond, Ind., chairman.

J. W. COMPTON, M. D.,
Chairman of Committee of Arrangements.

THE FOLLOWING PAPERS are announced as the programme of the American Dermatological Association, for its First Annual Meeting, in Niagara, Sept. 4, 5 and 6, 1877 :

1. On Molluscum contagiosum, by Dr. George Henry Fox, of New York. 2. Annual Address, by the President, Dr. James C. White, of Boston. 3. The Etiology of Cutaneous Diseases, by Dr. Lunsford P. Yandell, of Louisville, Ky. 4. On the Eczema marginatum of Hebra (tinea trichophytina cruris), as observed in America, by Dr. L. Duncan Bulkley, of New York. 5. The Pathology of Seborrhœa, by Dr. Arthur Van Harlingen, of Philadelphia. 6. Faulty innervation as a factor in Skin Disease, by Dr. Edward Wigglesworth, of Boston. 7. A case of true Prurigo (of Herba), by Dr. Robert Campbell, of New York. 8. On the Immunity of certain Mothers of children affected with Hereditary Syphilis, by Dr. James Nevins Hyde, of Chicago. 9. The Lymphatic Theory of Syphilitic infection, with a new view of the relation between the chancre and chancroid; and suggestions for the radical cure of Syphilis, by Dr. Wm. A. Hardaway, of St. Louis, Mo. 10. On the Relation of Impetigo Herpetiformis to Pemphigus, by Dr. C. Heitzmann, of New York. 11. On the Xeroderma of Hebra, by Dr. R. W. Taylor, of New York. 12. Case of an unusual form of Fragilitas Crinium, by Dr. Louis A. Duhring, of Philadelphia. 13. Two Cases of very late Hereditary Syphilis, by Dr. L. Duncan Bulkley, of New York. 14. The Pathological Histology of Psoriasis, by Dr. A. R. Robinson, of New York. 15. Auto-inoculation of Vegetable Parasites, and their non-identity, by Dr. Edward Wigglesworth, of Boston. 16. Affections of the testicle in Hereditary Syphilis, by Dr. R. W. Taylor, of New York. 17. Acute Conditions of disease excited by Iodide of Potassium, by Dr. Almon Brooks, of Chicago.

The Eighth Annual Meeting of The American Association for the Cure of Inebriety, will be held in the Washingtonian Home, Chicago, Ill., Sept. 12, 1877.

The following papers are promised :

"Manifestations of premature mental decay and nervous

exhaustion, induced by inebriety and its treatment." By Dr. E. C. Mann, New York city.

"Morbid Appetites." By Dr. George Burr, Binghamton, N. Y.

"On the principles which should govern the management of inebriates, and the institutions needed to aid in their restoration." By Dr. N. S. Davis, Chicago, Ill.

"Nature and treatment of inebriety." By Dr. George M. Beard, New York City.

"Insanity and inebriety contrasted." By Dr. Joseph Parrish, Burlington, N. J.

"The obligations of the State respecting inebriety." By Dr. T. H. Evarts, Rushford, Minn.

"The curability of inebriety." By Dr. Albert Day, Boston, Mass.

"Persistent alcoholism." By Dr. C. W. Earle, Chicago, Ill.

"Inebriety and its symptomatology." By Dr. T. D. Crothers, Hartford, Conn.

"The work of managing inebriates." By Professor D. Wilkins, Chicago, Ill.

"The responsibility of the medical profession in the production of opium inebriety." By Dr. J. B. Mattison, Brooklyn, N. Y.

"Hereditary inebriety." By Dr. B. N. Comings, New Britain, Conn.

"The gradual reduction of opium in the treatment of opium inebriety." By Dr. C. T. Widney, St. Louis, Mo.

"Appetency for alcohol." By Dr. D. H. Kitchen, Binghamton, N. Y.

Other papers are promised, but the titles are not yet received.

The President's address will be on the disease of inebriety; one evening will be devoted to a public reception, in which addresses from prominent men are expected.

This promises to be one of the most important meetings ever held by the Association.

AMERICAN PUBLIC HEALTH ASSOCIATION, 1877.

Fifth Annual Meeting, Chicago, Sept. 25—27.

To The Editor of The Chicago Medical Journal and Examiner :—

The American Public Health Association will convene in Chicago, Ill., September 25th, for its Fifth Annual Meeting. It will, as usual, continue in session three days. The leading topics for discussion will be those which are becoming most practically important in the growing cities and towns of the great West, and the more dense populations of cities in the older States. The President of this Association, in his capacity as President of the State Board of Health of Illinois, fitly represents the interests of the State Sanitary Service as now provided in eight of the States west of the Alleghany Mountains. To meet the active members of those State Boards, and to take conference with them, and all others who join with this Association, in the studies and efforts for promoting the public health, and enhancing the value and certainties of human life, will be a privilege greatly appreciated by all who attend this meeting.

The city of Chicago presents, at one view, a most comprehensive field illustrating the problems of sanitary engineering, and the public health service in great cities; and its sanitary engineers are successfully working out the most important of these problems, while the medical profession and health officers are active in the studies and duties of preventive medicine. The city of the prairies is becoming the city of parks, and, in common with the thousands of treeless towns in the West, the people are surrounding themselves with trees as Nature's friends of health. The subject of Trees and Forests is among those to be reported upon and discussed. Sanitary Drainage and the Remedies for Natural Disadvantages of the Sites and Sanitary Topography of Cities and Villages will be one of the topics discussed at the opening of the session ; and important papers will be presented and discussed, relating to Preventive Measures against Scarlatina, Diphtheria, Trichina, and other destructive maladies; while other more general topics will be brought to the attention of the Meeting, it is expected, about in the order shown in the annexed list of titles. The names of the contributors to the proceedings will be announced at the proper time by the usual circular, and it is especially desired that the papers on the Geography of *Phthisis*, by Prof. Hosmer A. Johnson; on Sanitary and Medical Care of the Poor, by Prof. Edmund Andrews; that on the "Stamping Out" Process in Zymotic Pests, by Prof. H. M. Lyman, and that on Forests and Trees, by Dr. Andrews, may be followed by very thorough elucidation, and practical discussion. On behalf of the Executive Committee.

Elisha Harris, *Secretary.*

The Executive Committee has reccommended that, for this meeting, the leading discourses, papers and discussions shall be arranged under the following Division of Subjects :

I. Sanitary Topography and the Systematic Drainage

and Sewerage of Cities and Villages.—Other Problems of Public Health.

II. Sanitary Control and Extermination of the Contagia of Typhoid (Enteric) Fever, Scarlatina, Small-Pox, etc.—Other Problems of Domestic Health.

III. Expert Testimony and the Pursuit of Exact Scientific Researches in Public Health Service.

Under these three general divisions, contributions are already promised upon the following topics, and, upon several of them, there will be discussions and written statements from original observation and experience :—

Sanitary Topography of Chicago, and the Artificial Remedies of Natural Disadvantages.

Proposed Sanitary Survey of the United States.

Problems, old and new in the Sanitary Drainage and Sewerage of Chicago and other Western Cities.

Sanitary Geography of Phthisis Pulmonalis and other Pulmonary Diseases.

Sanitary value of Forests.

Garden City.

Problems of Sanitary Inspection. Safe-keeping and Transportation of Food Supplies—Animal and Vegetable.

Sanitary Lessons of the Great Fire in Chicago.

"Stamping Out" Scarlatina and the Extinguishment of Zymotic Diseases.

Sanitary Observations and Preventive Measures in regard to Diphtheria.

Teachings of 22 years' Records of Mortality from Croup, Diphtheria and Scarlatina in a City.

Miasmata of Dwellings and Dwelling-grounds.

Family Health and the Relations of Heredity, Habit and Hygiene to it.

Practicable Method for securing Complete and Authentic Records of the Causes of Death throughout the United States.

Sources and Propagation of Trichina, considered with reference to Sanitary Measures.

Hygienic Care of Sailors and other Water-men, upon the Coastwise and Inland Waters.

Sanitary Safety in Railway Traveling.

Expert Testimony.

Hygiene in the Prevention of Insanity.

Sanitary and Economical Importance of the Best Surgical and Medical Treatment of the Needy Poor.

Tests and Supervision of Milk-Supplies of Large Cities.

Health in Education, as viewed in each Grade of the Schools.

Points of Enumeration and Inquiry which the Interests of the Public Health require in the TENTH NATIONAL CENSUS.

Methods of Promulgating Sanitary Knowledge and Authorized Information in regard to Vital Statistics and Prevalent Diseases.

Judicial and other Aids of Law in Public Health Service.

Discourse on the Present State of Exact Knowledge of the Causation and Prevention of Destructive Diseases which most harm Mankind.

OFFICERS FOR THE YEAR 1876–7.

President, JOHN RAUCH, M. D., Chicago, Ill; First Vice-President, LEWIS H. STEINER, M. D., Frederick, Md; Second Vice President, E. M. HUNT, M. D., Metuchen, N. J; Secretary, ELISHA HARRIS, M. D., New York, N. Y; Treasurer, J. FOSTER JENKINS, M. D., Yonker, N. Y.

ELECTED MEMBERS OF EXECUTIVE COMMITTEE.

JOHN S. BILLINGS, M. D., U. S. A; JOHN M. WOODWORTH, M. D., D. C; J. L. GIBON, U. S. N; HON. JACKSON S. SCHULTZ, N. Y; DR. C. H. OLSON, Mass; DR. H. A. JOHNSON, Ill.

Summary of Progress in the Medical Sciences.

PRACTICAL MEDICINE.

THE CURABILITY OF INSANITY.—Earle—(*American Jour. of Insanity*, April, '77.) That great injustice is done by superintendents of the institutions for the insane, to the public, by almost universally reporting recoveries of cases rather than of persons, is supported by statistics from twenty institutions for the treatment of the insane; showing a much larger percentage of recoveries than really occurs. The author says that, no patient ought to be reported as recovered twice or more within the same year, and that cases and not persons are constantly being reported, which make the percentage of cases much larger than actually exists. Such unreliable statistical knowledge is chiefly due to a spirit of rivalry among superintendents. There occurred in the Friend's Asylum, eighty-seven admis-

sions, which contributed two hundred and seventy-four recoveries to the statistics of that institution. One patient recovered fifteen times; another, thirteen; a third, nine; a fourth, eight, and a fifth seven times; making fifty-two recoveries; three of these five patients afterwards died in the hospital. Of the State Hospital at Worcester, from its organization, two thousand nine hundred and forty-nine patients were admitted; six hundred and ninety-four were readmissions. Seven persons were admitted an aggregate of one hundred and six times; one was admitted twenty-three times, one eighteen, one sixteen, one fourteen, one thirteen, and two eleven times each. One of the seven persons was discharged cured twenty-two times, one sixteen, one thirteen, two eleven times, one ten and one nine times. The seven persons furnished ninety-two recoveries, and yet two of them died in the hospital, and a third is now an inmate of it, considered hopelessly insane. Some of the chief factors which are instrumental in causing such difference in percentages of recoveries of insane people, says the author, are the special characteristics of the persons reporting them, his temperament and psychological individuality, experts before legal tribunals, often err in judgment upon insane cases. In contrast with the above reports, the State Hospital in Maine furnished statistics in the five years from 1846 to 1850, inclusive, of five hundred and eighty-seven patients, which were admitted during that time; of this number, two hundred and eighty-five, or a proportion of forty-eight and fifty-five hundredths per cent., recovered. The same institution again furnished statistics, from 1871 to 1875, inclusive, of nine hundred and fifty-three admissions, and three hundred and forty-nine, or a recovery of thirty-six and sixty-two hundredths per cent. The reports from these hospitals in Maine, approach more nearly the actual percentage of recoveries, than do the other institutions mentioned. There were admitted at the twenty institutions, in the course of the second five years of their operation, fourteen thousand five hundred and sixteen; the recoveries were in number, six thousand six hundred and eighty-nine; the proportion of recoveries to admissions, forty-six and eight hundredths per cent. The number admitted

during the last five years of their existence was, twenty-four thousand three hundred and eighty-three; the recoveries, eight thousand three hundred and fifty-four; and the per cent. of recoveries, thirty-four and twenty-six hundredths; these figures relate to cases and not to persons. The author does not believe that more than ten per cent. of insane people are curable, and to accomplish even this, they must have early and prompt medical assistance. W. F. L.

NOCTURNAL TERRORS IN VERY YOUNG CHILDREN.—Jules Simon.—(*Gazette Obstetricale*, 5 May, 1877.) Infants at the breast are dyspeptic much oftener than is supposed, and are then subject, during sleep, to starts, and awakenings in fright, which at a later period are the result of true nocturnal terrors. Recently M. Simon was called in the middle of the night, to a little girl of three years who was the victim of a veritable hallucination. This child, convalescent from whooping cough, had started up out of her sleep uttering violent cries, saying that she saw before her an enormous insect which frightened her, and only regained her senses when spoken to; the light was painful to her, but still she would not remain in the dark. This state lasted the rest of the night, but had entirely disappeared the next day. These nocturnal terrors are not very rare among children, and are caused especially by digestive troubles, though they may be entirely independent of them. Inquiry should always be directed to the digestive functions when such a case occurs. But the possibility of poisoning should also be thought of, for certain poisons manifest their effect by painful hallucinations. Stramonium, in particular, determines these accidents, as Dr. Thors has shown in the case of a child who had swallowed a large number of the berries of this plant. In ordinary cases, calmatives, such as bromide of potassium, or belladonna, and a mild purgative answer all the indications. L. W. C.

DEAFNESS AS A SIGN OF BRIGHT'S DISEASE.—M. Dieulafoy—(*La France Médicale*, No. 16, 1877. M. Dieulafoy reports the following case of deafness, occurring in a patient suffering with Bright's disease: Four years ago, the patient had

œdema of the face, polyuria, dyspnœa, then amblyopia, epistaxis, in a word, the symptoms of Bright's disease. These different symptoms gave but little trouble until four months since, when the dyspnœa became greater, and the œdema suddenly generalized over the entire body; the urine became scanty and high colored,as if the parenchymatous nephritis had become interstitial. There was no cardiac hypertrophy, no *bruit de galop*. Examination of the urine showed a notable proportion of albumen, its density was 1021, and the microscope revealed the presence of hyaline cylinders and numerous deformed red globules.

Besides these symptoms, the patient relates that the malady was ushered in by violent pains in the left side of the face, (trigeminal neuralgia) and by a *complete abolition of hearing* on the same side. She is very explicit on this point; deafness of the left ear, with neuralgia and œdema of the left side of the face, marked the début of the malady. Since then the deafness has never improved.

In another patient presenting similar symptoms, the disease was ushered in by severe neuralgic pains in the left side of the face, the pains still persisting up to the present time, and *deafness of the left ear*. The patient noticed the dullness of hearing at the same time as the diminution of sight, about fifteen days after the œdema of the face. The hearing has never completely been restored.

These two examples of deafness occurring under almost identical circumstances, excited the author's attention, and the question presented itself, whether it was simply a coincidence, or whether the auditory alteration was not consecutive to the albuminous nephritis, and he was not unwilling to admit that the same morbid state might determine troubles in the optic and auditory nerves. In his researches upon this subject, the author has found an analogous example related by Rasenstein, who says it is probable that the accident was connected with an œdema of the auditory nerve.

A fourth example of dullness of the hearing of the right side having preceded the œdema in a patient attacked with interstitial nephritis, is mentioned by the author.

M. Dieulafoy draws no conclusion from these cases, but simply calls attention to deafness occurring in the course of Bright's disease. L. W. C.

A Statistical Retrospect of the Trichina Epidemics in Saxony.—Reinhard.—(*Archiv der Heilkunde*, 1877, No. 3 and 4.) In sixteen years, from 1860 to 1876, there were thirteen trichina epidemics. The number of sick persons was 1,266, of which 19, or 1.58 per cent., died.

But very few were infected through eating raw meat; mostly by eating hard, smoked sausages, and other varieties of sausages; over seven-eighths of all poisoned were infected through eating sausages; very few cases can be traced to the eating of ham. Out of the nineteen deaths, three were infected through eating raw meat; two by hard, smoked sausages; eight by eating common sausages, and two by eating ham.

The epidemics were confined almost entirely to large cities and to the thickly populated districts. The source of the infection was traced, twenty-nine times, to butchers, and only five times to meat raised for home consumption. The numnumber infected by one trichinosed hog is very small. It is determined that one medium hog furnishes meat for from 140 to 200 people; out of this number, on the average, not one-fourth are infected, and sometimes not more than twelve.

The tax-list showed that in these sixteen years, over 3,960,500 hogs were slaughtered in Saxony. Out of this number thirty-nine gave rise to epidemics, or one in 180,000 hogs. But observations disprove that trichinosis is so scarce among hogs. Microscopical observations were made in many parts of Saxony.

In Ebenbach, O. L., 2,034 hogs were examined, and one was found to be suffering from trichinosis; in Dresden, Dr. Meissner, veterinary surgeon, examined 3,346 hogs, and found four suffering from trichinosis; or one in 839. The most reliable examinations we have come from Braunschweig. Dr. Uhde examined 757,716 hogs, and found ninety-five infected, or one in 8,000.

Taking the average of tables presented, and we find one hog

in 7,706 suffering from trichinosis. This would give for Saxony, with her 6,960,000 slaughtered hogs, about 983 trichinosed hogs. Taking the number of epidemics in consideration, we have four in 100 infected hogs giving rise to such a visitation.

The author says: "Many believe that for every infected hog detected and condemned, so many lives have been saved, or rather, so much suffering prevented. But this is far from the truth, as above statistics have shown."

Neither does the author think that microscopical observations can be carried out in large cities with any degree of accuracy whatever. Several epidemics were caused by hogs that had passed microscopical examination. The examinations having been made by men whose ability to perform them could not be doubted.

TWO CASES OF RATTLESNAKE BITE SUCCESSFULLY TREATED BY INJECTIONS OF CARBONATE OF AMMONIA INTO THE VEINS. Knott. (*Philadelphia Med. and Surg. Reporter, July 21st and 28th*, 1877.) CASE No. 1. Was seen fifteen minutes after having received a bite on the hand from a rattlesnake; a large drink of whiskey had just been administered; body bathed in profuse clammy perspiration; no pulse at wrist; respiration abdominal and irregular; pupils completely dilated; inability to swallow. A half drachm of the following solution was immediately injected into the superficial veins of the hand:

℞. Ammoniæ carbonatis, grs. x1; aquæ destillatæ ℥ j.

An almost imperceptable pulse at the wrist appeared, but was immediately lost again. A drachm injection of same solution into the cephalic vein produced almost immediately a pulse at the wrist of about thirty to the minute. The second and third injections followed by still greater improvement, and after the fourth, patient appeared as well as before the reception of the bite. On the following morning patient found in perfect stupor; pupils dilated; pulse feeble and irregular. Twenty-five injections of the ammonia were made in the course of an hour, under which the patient gradually returned to consciousness and sight. Patient was now put upon whisky

treatment to test its comparative merit. Large doses were given every fifteen minutes, and continued three hours, when he fell back with stupor, with feeble pulse, dilated pupils and abdominal respiration. Prompt relief was brought about by the injections of ammonia, the remedy being also administered by the mouth. Ordered quinine and beef tea. One more relapse occurred on the following day, which was relieved by four injections, after which the patient was convalescent. Discharged cured on the fourth day.

Case No 2. A colored boy was seen about ten hours after reception of the bite. Whisky had been given during the interval. After three injections of the solution of ammonia into the cephalic vein, the boy arose to his feet, without pain or inconvenience.

The following was ordered:

R. Spts. frumenti ℥ xvi; ammoniæ carb. ℥iiss Ft. Sol. Sig. Tablespoonful every two or three hours in water.

Patient was not seen again, but his recovery was affirmed.

The first patient, a man of intelligence, stated that the poison was felt not exceeding two minutes from the reception of the bite; the first symptoms being nausea and giddiness, with loss of sight. One point particularly noticable in the treatment with ammonia; on making an injection while the patient was under the influnece of the poison, the blood that escaped from the veins, by the needle of the syringe, was of an inky appearance. On the second injection, though made on the opposite side and immediately following the first, the blood presented more the appearance of arterial than veinous, showing plainly the powerful effect exerted by the ammonia in changing the condition of the blood.

Dr. K. is of the opinion, from his experience in these cases, that we have but little to fear from the introduction of air into the veins while employing ammonia, believing this agent prevents any serious effect there-from. But little attention was given to prevent the introduction of air, yet no bad effects were observed. The above cases are the first in which this treatment has been employed in this country. The credit of the introduction of this treatment into the profession, is due to Professor Halford, of Australia.

INTESTINAL OBSTRUCTION.—Dr. Southey—(*British Medical Journal*, May). The case was of a young woman, who had three days previously been attacked on board ship, with severe abdominal pain, complete obstruction of the bowels and stercoraceous vomiting. She had been treated by the ship's captain with calomel and jalap powder, every two hours. It was thought possible that obstruction was due to pelvic hematocele, as the attack occurred during her menstrual period; examination, however, failed to confirm the idea. Over the track of the colon it was hollow and resonant, but over the hypogastrium, hard, indicating an empty colon and loaded small intestines. A long tube was passed into the rectum, but only a little fluid could be injected through it, and that caused great pain. The following plan was then tried, with success. The patient was placed in the genu-pectoral position, a long tube inserted in the rectum, and the anus held closely around it. A siphon bottle of soda water was then connected with the tube, the bottle being placed in hot water to increase the elasticity of the gas contained in it. When the valve of the bottle was opened, the gas and water ascended into the rectum, causing enormous abdominal distention, and severe pain.

Two bottles of the soda water were thus used, when the patient felt "something give way or burst," and a copious action of the bowels followed. No medicine was used except subcutaneous injections of morphia. In two days the patient was well enough to undertake a journey. This plan of treatment which seems preferable to the simple injection of fluid, was recommended two years ago, in one of the French reviews.

ON CONSTIPATION.—Thomson—(*The Medical Record*, May, 1877). Constipation is due to deficient action of the small, and some portion of the large intestines. Of the small intestines, there are two operative causes: deficient secretion, and want of innervation, or muscular action. Deficient secretion in the small intestines may be due to some disturbance of the liver, and constipation as a result, may date from

some severe form of fever in which the liver was involved. In such cases there is not a preponderance of fecal accumulation and impaction, but rather, instead, a sluggish action of the bowels, recourse to medicines being necessary to bring about a movement once in four or five days. The symptoms of deficient action of the small intestines other than constipation, are usually negative; the one which gives the patient the most discomfort, is a dull indefinite headache, located in the posterior part of the head, and is best relieved by such remedies as will promote a free discharge of bile. The tongue is not usually large and flabby, but is reddened along the edges and tip. The secretions of the mouth are commonly viscid. The treatment should not consist of mild cathartics, or purgatives, as the condition of the case would be provoked by them, but what is necessary, is to increase the amount of fluid in the intestines by causing the patient to drink a great deal more water than is his custom. The laxative action of the water may best be insured by the addition of some mild saline; the reason of this is the mixture formed by the union of some saline with water does not readily pass from the intestinal mucous membrane into the general system,—water being retained in the intestinal tube by the saline, excites peristaltic action of the bowels, and so produces an evacuation of its contents. To increase the power of action of the intestines, the author uses small doses of quinine, combined with sulph. magnesia, e. g. sulph. mag. ℥i., sulph. quin. gr. i., mixed and drank in a glass of water every morning. It takes, however, usually from one to two weeks before much effect is noticed.

Deficient innervation of the small intestines, as a rule, accompanies constipation in elderly persons, and also in those whose habits are sedentary. The means to be employed to overcome this form of constipation, are quite at variance with those used in the form of constipation just spoken of. If much water is given this class of patients, weakening of their digestive powers, followed by loss of appetite, and heaviness in the head, will be the result. To increase the innervation of the secretory apparatus, in those who are obliged to remain at

their occupations, water is applied externally. A sitz bath, with the water as cold as the patient can bear it, and have good reaction follow, will in very many cases work wonders. Sponging the spine and bowels with cold salt water, made as irritant as can be borne, on rising in the morning, is a very efficient method of using water externally. Some cases are benefited by giving the bowels a local shower-bath.

Of the large intestines, the same causes work the same results. Deficient innervation is by far the most common in this form of constipation. Large fecal accumulations, resulting from want of nerve power in the colon, or rectum, are usually present without the patient's knowledge, and rectal abscess may be the result. The treatment consists in keeping the rectum empty by means of enemata, but great care should be exercised against using the syringe every morning for any considerable length of time, as such a habit is likely to become fixed. After using the syringe to remove accumulations in the bowel, other measures for restoring lost innervation to the organ should be instituted. Strychnia used hypodermically into the sub-mucous tissue, often proves very efficient.

W. F. L.

II. Surgery.

A Family of Bleeders.—Lossen (*Deutsche Zeitschr. f. Chir.* Band, v. 3).—The family Mampel, of Kirchheim, near Heidelberg, can be traced back to the last century. The originators of this line were married in 1798, both of healthy parentage, in the best of health. They had six sons and four daughters; of the former three were bleeders. In the following generation there were thirty-two children belonging to two of the daughters; of these, thirteen were troubled with the hemorrhagic diathesis. In the third generation there was only one case. All those afflicted were male children, and in appearance did not differ from the rest. *The children of the bleeders remained unaffected. The disease was inherited entirely from the female members, who themselves, however, were not troubled with hemorrhagic diathesis.* During three genera-

tions the family counted one hundred individuals, of which seventeen were afflicted with the hemorrhagic diathesis, and nine died of profuse hemorrhage. The hemorrhage occurred from slight external wounds, or from internal, subcutaneous and intermuscular wounds, and sometimes from simple contusions. Hemorrhages also occurred from the gums, the nasal and bronchial mucous membrane, and the mucous membrane of the stomach and bladder, and in the joints hemorrhage frequently took place.

Of the nine fatal cases of hemorrhage, six occurred from simple wounds, one was subcutaneous, one occurred from the lungs, and one from the stomach.

THE MOST FREQUENT CAUSE OF THE RETENTION OF URINE IN OLD PEOPLE.—Prof. W. Busch (*Langenbeck's Archiv Bd.* xx. —3).—The sphincter of the bladder, and the internal orifice of the urethra are very near each other in boyhood, therefore, the the pressure of the urine against the lower part of the bladder finds an easy outlet through the internal orifice. This explains very clearly and easily the enuresis nocturna of children. At puberty the prostate begins to increase in size, and the sphincter is then caused to recede, and a greater force is necessary to expel the urine. If the prostate becomes hypertrophied, the part above the caput gallinaginis becomes enlarged mostly, so that the enlargement encroaches on the bladder, the internal orifice of the urethra is moved toward the bladder, and upward so as to occupy the highest point of the prostatic tumor. It no longer forms the lowest part of the apparatus, but is surrounded on all sides by portions of the bladder, particularly posteriorly, where the bladder has a tendency to assume a ventricular form. When the bladder contracts the whole pressure is exerted against the prostatic enlargements, causing the lobes to approach each other, which in turn are pressed against the interior orifice of the urethra, thus closing it tighter instead of opening it.

This, according to the author's opinion, is more frequently the cause of retention than the enlargement of the middle lobe of the prostate and its action as a valve in the urethra, as is frequently described.

The author's opinion is further strengthened by the fact, that persons suffering from enlarged prostates are not able to expel their water while standing, but they can do so by bending over so as to bring the lowest part of the bladder on a level with the internal orifice.

The autopsy of an old man further confirms the author's opinion. Some time before his death he was unable to pass water, and was obliged to use the catheter. It was found that the prostate gland was not enlarged, but that the bladder immediately behind the prostate had assumed this diverticular form. Now, when the bladder was filled and force was used, this diverticulum was filled up and the prostate was pressed against the urethra as above described, and prevented the escape of urine.

STRUMA PULSANS ACUTA.—Prof. Lucke (*Deutsche Zeitschrift f. Chir.* Band. vi.). The author objects to using the terms, pulsating goitre, and aneurismal goitre, synonymously. Aneurismal goitre as described by Virchow—where the arteries are dilated—has never been observed by the author.

The greatest number of pulsating goitres are not aneurismal in the full sense of the word. They present the clinical symptoms of aneurism; compressibility, pulsation, and murmur—the same as the pulsating sarcoma; but the dilatation of the arteries is nothing permanent as in an aneurism.

Pulsating goitres occur mostly in youthful individuals. The author thinks they have no connection whatever with Graves' disease.

In 1876 Strassburg was visited by a goitre epidemic, and during this visitation L. observed many cases of pulsating goitres. This pulsating goitre occurs only in the most acute cases, and in the majority of cases preceding strumous diathesis could not be discovered. This acute swelling of the thyroid gland occurs sometimes with such rapidity as to produce the same symptoms as the acute inflammation of the glands; dyspnœa, tracheal stridor and consecutive cyanosis, in consequence of the obstructions to venous circulation. Headache pharyngeal difficulties, etc. These symptoms appear with dif-

ferent degrees of severity. Sometimes these symptoms disappear and the patient recovers, or the pulsations cease, and an ordinary strumous swelling remains.

This complaint is susecptible to treatment; application externally or parenchymatous injections, generally of iodine, being sufficient.

The acute pulsating struma is a tumor not circumscribed and consists, in a majority of cases, of the whole gland. It is soft and disappears under gradual pressure. By palpation the pulsation is very evident. Pulsation is more or less visible, it is most apparent in those cases where there is the greatest dyspnœa; pulsation is also great in the neighboring carotid.

The author is of the opinion that the pulsating struma is but a stage in the development of the acute goitre, and that if the disease persists it will finally form a common goitre, and not an aneurismal tumor. This form of pulsating tumor shows itself mostly in epidemics of acute goitre. It occurs mostly in young people up to the age of 17 years.

The author says there must first be a thorough infection by the goitre miasma, and following this comes the acute dilatation of the capillaries and obstruction to the circulation of the thyroid artery, and in some measure the carotid. He further says that there is considerable analogy between the pulsating struma and pulsating sarcoma as regards the dilatation of the capillaries.

To Prevent the Entrance of Liquids into the Eustachian Tube.—E. Zaufal. (*Monatsschrift für Ohrenheilk.* xi, 4.) In the Präger Med. Wochenschrift Prof. Z. discusses the various measures which have been observed, in order to avoid the unpleasant consequences, that have been known to sometimes arise from the entrance of liquid medicines into the Eustachian tube. He comes to the conclusion that on the one side we can not successfully treat the diseases of the nasal and nasopharyngeal cavities without the use of medicinal fluids, and on the other side all the safeguards so far employed, can not always prevent the fluid from entering the Eustachian tube. Z. now recommends a maneuver which, he claims, will most as-

suredly render that accident impossible. Standing behind the patient the surgeon, with two fingers, shall push the soft palate boldly upward toward the tubal orifices while liquids are injected into the nostrils. The procedure is painless and not unpleasant, *if only the pressure upon the velum palati be strong.* A slight and slow manipulation occasions a repeated retching, but a strong, bold push causes just one contraction of the pharyngeal muscles that even assists to tightly close the Eustachian tube. Experiments on anatomical preparations as well as the examination with his naso-pharyngeal speculum, have convinced Z. that the tubal orifice is mechanically blocked up by the soft palate whenever the latter is moved upwards, either by the action of its levator as in phonation or by a pressure from below as by the surgeon's fingers.

THE NASO-PHARYNGEAL SPECULUM.—E. Zaufal. (*Monatsschrift für Ohrenheilk.* xi, 4.) Prof. Z. has recently introduced a funnel-shaped speculum for the direct inspection of the naso-pharyngeal space. These specula come in sets, varying from 9 to 11 centimetres in length, and from 4 to 8 millimetres in width. They are introduced through the inferior or middle nasal meatus, and allow a direct illumination by a reflector, of the posterior nasal and naso-pharyngeal cavities. By means of these specula, Z. was able to diagnose pathological conditions of the naso-pharyngeal cavity in many cases, where without them a correct diagnosis could not be made. But these specula also simplify and facilitate the application of medicine, and the performance of the most frequent operations in the naso-pharyngeal space. The application oftenest called for in that cavity is the cauterization either of ulcers of different kinds, or of hypertrophied tissue around the Eustachian orifice, or of enlarged follicles, or of polypoid vegetations, or of the whole tumefied mucous membrane. Pushing the speculum in so far that its end fairly encircles the spot which is to be cauterized, the surgeon can be perfectly certain of the extent of his application, no matter whether he uses the pure or mitigated caustic, or chromic acid, or the electro-cautery, (in the latter case the speculum must be of hard rubber, which

requires a stronger illumination). No other mode of cauterizing is so simple, so painless, so convenient and so efficient as the cauterization by means of the naso-pharyngeal speculum. Another operation in which the naso-pharyngeal speculum can be of great value, is the removal of retro-pharyngeal polypi, by means of the cold or heated wire snare. The difficulty of this operation consists in nicely adjusting the snare around the basis of the tumor so that it will not slip. Now, in the first place, the inspection through the speculum will complete or correct our diagnosis as to the actual site of the basis of the tumor, then when the wire is applied from the mouth, we can examine through the speculum as to its proper application, carefully adjust it, and by means of a proper tenaculum prevent its slipping off. Z. reports three cases to substantiate his remarks, and to illustrate the working of his speculum.

URETHROTOMY IN A GIRL OF 9 YEARS. M. Périer. (*L'Union Médicale*, No. 32, 1877.) M. Périer read a report to the *Société de Chirugie* of a case of urethrotomy, by M. Lemay, upon a little girl of 9 years, who had introduced a needle within the urethra. The needle, escaping from the hands of the child, had penetrated the bladder, and had given origin to a calculus, which interfered with the functions of the organ. The operation allowed extraction of the calculus, which had the needle for a centre, and weighed 15 grammes, (231 grains); a cure followed the operation. The needle had remained in the bladder one month, according to the assertion of the little girl.

The following discussion took place:

M. Théophile Anger offered some remarks upon lithotomy in women for the extraction of vesical calculi. He has twice performed urethrotomy in cases of this kind. In the first case it was a woman of 45 years, who had a stone in the bladder for two years. The stone was small, but occasioned incessant pain. The extraction, by means of urethrotomy, was followed by a rapid cure. M. Anger has since seen the patient, who has had no incontinence of urine.

Last year, M. Anger operated in the same manner upon a

young lady of 18 years, who had an immense calculus, which gave her intolerable pain. He succeeded in making, after chloroforming, a large incision, with a probe-pointed bistoury, which gave rise to a considerable loss of blood. The patient got well, but for several months had incontinence of the urine, which had now almost entirely disappeared.

Upon the whole, M. Anger believes that urethrotomy gives better results than vaginal lithotomy.

M. Paulet understands how one may hesitate between urethrotomy and vaginal lithotomy in the case of an adult woman. But it is different in the case of a child, and the choice is not always possible. Some time since, a little girl was brought to him, 12 years of age, but who appeared to be no more than 8 years. She had a stone in the bladder. The question was how to get it away. There was no room by way of the vagina, and vaginal lithotomy was impossible. M. Paulet tried lithotrity, but it was impossible to crush the stone, even with the lithoclast of M. Guyon. He decided to try urethrotomy. A superior incision, made with a probe-pointed bistoury, allowed the introduction of the forceps and extraction of the calculus. There was incontinence for 15 days.

M. Verneuil said that lithotrity in women should be renounced only when its impossibility is evident. After lithotrity, he places the vaginal operation in the first rank, except in children. For very large calculi there remains supra-pubic lithotomy. Cases of incontinence of urine after urethrotomy are not rare. M. Verneuil cites the case of a little girl, upon whom urethrotomy was practiced without success; the stone would not pass; supra-pubic lithotomy allowed the extraction of the stone. The child got well, but incontinence remained, as a result of the urethral incision. Vaginal lithotomy rarely causes a permanent fistula.

To sum up, according to M. Verneuil, urethrotomy should be the exceptional method; he rejects equally forcible dilatation of the urethra. He prefers lithotrity, and if that is inapplicable, the sub-pubic or the vaginal operation.

M. Tillaux wished that this question of lithotomy in women

might be cleared up. Malgaigne rejects absolutely the urethral operation, because of the incontinence of urine, and advises the vaginal operation. On the other hand, M. Reliquet declares himself absolutely in favor of urethrotomy, and rejects the vaginal operation.

According to Reliquet, incontinence of urine after urethrotomy depends upon dilatation of the vesical neck without previously chloroforming the patient; the vesical sphincter is then torn, while this accident is not to be feared with chloroform.

M. Verneuil gives the first place to lithotrity in women, when it is possible. According to M. Tillaux, this operation would be less favorable in women than in men. Lithotrity requires the crushing of the stone in a bladder filled with fluid. Now, the liquid does not remain in the female bladder; it comes out with the instrument, and one must work in an empty bladder. M. Tillaux concluded by saying that it was necessary to review the question of lithotomy in women.

M. Launelongue thinks that many surgeons perform lithotrity in the empty bladder, and that it is easier than with fluid in it. The bladder in women is more tolerant than in men, except, however, in young girls. According to important documents collected in the thesis of M. Hybord, lithotrity in women, compared with lithotomy, is an easy operation, not dangerous, and should be practised whenever possible.

Between vaginal lithotomy and urethrotomy, M. Launelongue pronounces himself for the former; it favors healing when disease of this organ complicates calculus.

M. Duplay said that in America, vaginal lithotomy is a current operation, and gives good results. He thinks, with M. Tillaux, that lithotrity is difficult in women, and he regards, above all, lithotrity in the empty bladder as a surgical heresy.

M. Duprès declares that urethrotomy is a bad operation, because it gives no more space than dilatation of the urethra. For himself, he prefers dilatation when haste is required, and lithotrity when one may go more slowly about it. In the latter case, he does not think it more useful to make injections

into the bladder, but it is necessary at least, that there should be a little urine present.

M. Marjolin has observed that in little children the bladder is very intolerant, and keeps with difficulty, liquids injected into it. He has noticed, moreover, that calculi are rare among girls; he has seen but one in 18 years.

M. Leon Le Fort said that Thompson advises emptying the bladder first, and then to inject 150 to 180 grammes of liquid. There would be no danger, according to him, in performing lithotrity in the empty bladder.

M. Verneuil this morning performed lithotrity in a woman, or attempted it, rather, but did not remove the stone. He introduced the lithotrite, and moved it easily about the bladder, which was empty, without causing pain. But it is not always so. Certain patients have energetic contractions which do not permit manipulation with the lithotite. It becomes necessary then to inject with precaution, a certain quantity of fluid. It is generally well to have liquid in the bladder.

M. Trelat, when he has a lithortrity to perform commences by emptying the bladder, then injects a moderate quantity of liquid. According to him, it is working blindly to operate without knowing whether or not there is liquid in the bladder.

M. Marc Sée remembers that Nélaton used to empty the bladder, and then inject a certain quantity of water before operating.

M. Périer, the reporter, said that he had only in view, in his report, calculi in girls. In the report of operations made at St. Bartholomew's Hospital, London, by Walch-Hall, it is shown that lithotrity in young girls is injurious. Walch-Hall first dilates the urethra; if the stone is large, he has recourse to the sub-pubic operation; if it is of medium size, he tries vaginal lithotomy. M. Périer believes that incontinence of the urine is less frequent than M. Verneuil supposes after urethrotomy. L. W. C.

A New Method of Curing Popliteal Aneurisms.—Martin Burke, M. D.—(*N. Y. Medical Journal*, June, 1877.—There has recently been introduced into the surgical wards of

Bellevue Hospital a novel method of treating Popliteal Aneurisms, which has thus far proved successful in its application. It consists in the employment of a conical shot-bag suspended from a height by a rope, the apex of which cone presses upon the femoral artery in Scarpa's space and causes all pulsation to cease in the aneurism below. The shot-bag is made of canvas in the form of a flattened cone, its apex measuring one inch in diameter. A rounded piece of cork or india rubber is accurately fitted to the inside of the apex of the cone; a hollow rod of bamboo reaches down to and rests upon the rubber or cork, being held directly in the centre of the cone, while the shot is filled around it to the requisite weight, being about twelve pounds. A cover of canvas is tightly stitched over the base, in the centre of which is an aperture for the passage of the rod. A stout wire hook is fastened to the centre of the base of the cone, to the rod as it emerges from it, and the apparatus is then ready for suspension. To suspend it a pully is driven into the ceiling through which is passed a rope, one end of which is directly attached to the wire hook in the shot-bag, having first been passed through rings attached to the bamboo rod to keep it in place. To the free end of the rope is attached a hollow rubber tubing, to give elasticity to the apparatus, to the extremity of which is attached a hook which connects with the hook in the centre of the base of the shot-bag by means of a linked chain. The amount of pressure is regulated by lifting or lowering the weight in the links of the chain. With the apex of the cone resting on the femoral artery the pressure is carefully regulated until pulsation ceases in the aneurism, no greater pressure being allowed than is necessary to produce this effect.

Three cases are reported as having been successfully treated by this method. The minimum time of application required to produce cessation of the pulsation in the aneurism, was six days, but for security the apparatus was allowed to remain some days longer. The maximim time was sixteen days. The patient suffers but little pain and but little inconvenience. There was no excoriation at point of pressure. A suggestion is put forth that not only for popliteal aneurism, but for aneu-

risms of other arteries and also for some cases of secondary hemorrhage, with certain modifications, this apparatus may be successfully applied.

III. Therapeutics.

A Large Dose of Croton Oil. Sharp. (*The Ohio Med-Record*, May, 1877.) A lady, through mistake, swallowed about a teaspoonful of croton-oil. Discovering the accident, she alarmed the family, who immediately summoned medical assistance. Free administration of sweet milk and cream, and olive oil, in connection with white of eggs and an emetic dose of mustard was given, and supplemented by large doses of sulphate of zinc at short intervals. Patient was also allowed to drink freely of mucilage of gum acaciae. She recovered rapidly, with no ill effects from the oil. W. F. L.

Woorara in Tetanus. Knecht. (*Translated by Watson, N. Y. Med. Jour.*, June 1877.) Dr. K., physician to the prison at Walhiem, has collected a record of fifteen cases of Tetanus treated with Woorara. Two of the number were Tetanus Rheumaticus, and thirteen were Tetanus Traumaticus. The two former recovered, and seven out of the thirteen of the latter. The remedy was administered largely subcutaneously, but a few cases received it also by the mouth.

With some of the cases, chloral was given at the same time, but the greater number were treated by Woorara alone.

The dose by injection was $\frac{1}{125}$th of a grain, which was gradually increased to $\frac{1}{6}$th of a grain, no effect being discovered until the latter dose was reached, after which a remission of the trismus was perceptible.

The maximum dose was $2\frac{1}{3}$ grains. The usual dose was $\frac{1}{2}$ a grain, repeated from two to five or seven times daily, according to the severity of the case.

The greatest amount received by one patient during the course of treatment, was $18\frac{3}{4}$ grains. In this case a condition of general paralysis was produced, with cessation of respiration, which was controlled by applications of electricity, after which improvement rapidly progressed to recovery.

LIST OF PHYSICIANS, in the State and city, who have been licensed to practice medicine by the State Board of Health, to date:

Drs. W. H. Byford, graduated Ohio Medical College, Cincinnati, March 4, 1844; Reuben Ludlam, Medical Department University of Pennsylvania, March, 1851; Robt. L. Rea, Medical College of Ohio, Cincinnati, March 1, 1855; John H. Rauch, Medical Department University of Pennsylvania. March 20, 1849; Ralph E. Starkweather, College of Physicians and Surgeons, N. Y. City, Nov. 10, 1868; Charles C. Buckley, College of Physicians and Surgeons, N. Y. City, March 12. 1867; Charles H. Vilas, Hahnnemann Medical College, Chicago, March 14, 1873; Eddy Bert, University of Göttengen, Germany, Dec. 23, 1864; Samuel Ingraham, Bennett Medical College, Chicago, June 20, 1877; Henry M. Bannister, Columbian College, Washington, D. C., June 20, 1871; Joseph S. Lane, Licentiate Rock River Medical Society, Beloit, Wisconsin, March 16, 1847; Francis A. Emmons, Rush Medical College, Chicago, 1863; King Barton Hunter, University of Nashville, Tennessee, Feb., 1877; Brock McVickar, Fairfield Medical College, Fairfield, N. Y., 1831; Robt. Hunter, University of New York, March 5, 1846; Edwin W. Hunter, Rush Medical College, Chicago, Feb. 21, 1877; Ambrose M. Read, Bennett Medical College, Chicago, Feb. 21, 1877: H. D, Garrison, Eclectic Medical Institute, Cincinnati, Ohio, May 12, 1857; Cornelius A. Logan, Miami Medical College of Ohio, Cincinnati, Feb. 28, 1853; Oscar C. DeWolf, Medical Department University of N. Y.. March 2, 1858; E. F. Buecking, Bennett Medical College, March 2, 1876; H. E. Hildebrand, Bennett Medical College, June 22, 1877; William P. Peirce, University of City of N. Y., March 6, 1852; Richard N. Foster, Hahnnemann Medical College, Chicago. March 20, 1869; Joel R. Gore, Medical Department University of N. Y., March 8, 1850; Charles Adams, Hahnnemann Medical College, Feb. 26, 1872; Geo. M. Fox, Castleton Medical College, Castleton, Vt., June 26, 1851; D. Q. Sheppers, Rush Medical College, Chicago, Jan. 26, 1866; Sarah Hackett Stevenson, Woman's Hospital Medical College of Chicago, March 2, 1875; Julius T. C. Hoffman, Rush Medical College, Feb. 3, 1868—University of Würzberg, Germany, Aug. 2, 1870; Robert B. Treat, Eclectic Medical Institute of Cincinnati, Ohio, 1847, P. S. Hayes, Rush Medical College, Chicago, Jan. 17, 1872; Justin Hayes, Cleveland Medical College, Cleveland, Ohio, March 10, 1850; Swayne Wickersham, University of Pennsylvania, March, 1855; Joseph B. Rood, Rush Medical College, Chicago, Feb. 5, 1868; J. Owen Hughes, Rush Medical College, Chicago, Jan. 25, 1867; John Geurin, Rush Medical College, Chicago, Feb. 1866; John M. Pilsbury, Jefferson Medical College, March 10, 1865; John E. Gilman, Hahnnemann Medical College, Feb., 1871; Michael T. O'Clery, Rush Medical College; Charles White, Rush Medical College, Feb. 15, 1863; James I. Tucker, Medical Department Harvard College; Alexander Fisher, Fairfield Medical College, March, 1834; Edward A. Ince, Hahnnemann Medical College, Feb. 12, 1877; Jonathan W. Brooks, Jefferson Medical College, March 4, 1835; Wm. F. Kessler, University of Leipsic, Saxony, April. 1847; James S. Stitt, Chicago Medical College, Chicago, March 9, 1869; Stephen O. Richey, Chicago Medical College, March 21, 1876; Emil Schattenfels, Bennett Medical College, May 21, 1874; John G. S. Mohr, University of Copenhagen, Denmark, July 5, 1867; Timothy R. Nute, Dartmouth Medical College, May, 1850; W. H. Woodyatt, Western Homœpathic Medical College, Feb. 27,

1869; John Reid, Jefferson Medical College, Philadelphia, March, 1847; Frederick A. Hess, Rush Medical College, Feb. 19, 1873; William E. Clark, Vermont Medical College, June 10, 1845; T. B. Shanahan, Rush Medical College; Thos. T. Ellis, The Royal College of Physicians, Edinburgh, Scotland, March, 1842; Alex. H. Cooke, University of the City of New York, March 6, 1846; J. Spafford Hunt, Jefferson Medical College, Philadelphia, March 8, 1856; Geo. P. Cunningham, Rush Medical College, Feb. 21, 1877; Julius Otto, The Chicago Medical College, March 21, 1876; Jacob May, Rush Medical College, Feb., 1876; A. W. Woodward, Hahnnemann Medical College, March 25, 1865; Norman Bridge, The Chicago Medical College, March 9, 1868; John F. Williams, The Chicago Medical College, Mareh, 1865; Henry Upton, Rush Medical College, Jan. 25, 1867; James H. Bates, The Long Island Medical College, June 24, 1874; William Tracy, Rush Medical College, Feb. 1, 1877; Gustav H. C. Fricke, Rush Medical College, Feb. 3, 1869; P. O'Connell, The Queen's University in Ireland, June 19, 1872; Louis Varges, The University of Gottingen, May 21, 1833; M. B. Carleman, Rush Medical College, Feb. 3, 1869; John Nicolai. Medical Department Lind University, Chicago, March 4, 1861; Joseph F. Beseler. The University of Berlin, Germany, March 14, 1838; John C. Webster, Harvard Medical College, March 13, 1867; G. C. Paoli, Rush Medical College, Jan. 24, 1866; Eugene S. Atwood, Rush Medical College, Feb. 21, 1877; A. F. Weekes, Rush Medical College, Feb. 22, 1849; C. A. Wilbur, The Castleton Medical College, June 20, 1852; Adelia Barlow, Woman's Hospital Medical College, Chicago, Feb. 29, 1876.

ANNOUNCEMENTS FOR THE MONTH.

Societies.—Mondays, September 3d and 17th, Chicago Medical Society. Mondays, September 10th and 24th, Chicago Society of Physicians and Surgeons.

Clinics.—Saturdays, at Rush College, at 2 P. M. Surgical, Prof. Gunn. Tuesdays, at Chicago Medical College, 9 A. M. Surgical, Prof. Hyde.

Lectures.—Mondays, 4 P. M., at Cook County Hospital Necroscopy Theatre. On Pathological Anatomy, Prof. I. N. Danforth.